PRESERVATION OF NATIONAL MONUMENTS.

FIRST REPORT

OF THE

CURATOR OF ANCIENT MONUMENTS IN INDIA

FOR THE YEAR 1881-82.



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PREFACE.

Preliminary inquiries, 1880.

IN April 1880, the Supreme Government placed me on special duty for the purpose of investigating the condition of monumental buildings at Lahore, Delhi, and Agra. After visiting these places, I submitted a report, dated 10th May, together with a List of the Principal Monuments throughout India (see Appendix II, page xix). I have now added to this list particulars of the works of conservation that have been undertaken and are in progress.

Lahore and Delhi Surveys.

2. A temporary establishment of draftsmen sanctioned was engaged during the year in measuring the buildings at Lahore and Delhi mentioned in this report; and during July, I inspected and directed the work.

Sanchi and Mandu Surveys.

3. The measurement of the structures *in situ* and the fairing out of the drawings proceeded during the year. A party of draftsmen were engaged later on at Sanchi and Mandu; and the work at Lahore, Delhi, and Amritsar was continued up to April 1881, when the whole party assembled at head-quarters and turned their attention to the completion of drawings.

Tour in November-December 1880.

4. On the 2nd November 1880 I left Simla on tour, visiting Lahore, Amritsar, Agra, Gwalior, Allahabad, Sanchi, Mandu, Ujain, Benares, Jaunpur, returning to Simla, where I drew out reports on the places visited, and awaited the directions of the Government of India. In obedience to orders, I proceeded to Calcutta, arriving on the 19th January 1881.

Appointment of Curator.

5. On the 28th January I was gazetted Curator of Ancient Monuments in India; and on the 2nd February following, received instructions to inspect the principal monuments throughout India (see Resolutions in the Home, Revenue and Agricultural Department, Appendices I and K, page lxxiii).

Tour in Madras, Bombay, and Rajputana, 1880.

6. I left Calcutta on the 6th February, and proceeded to Madras, visiting Mahavellipur, Vellore, Trichinopoly, Srirangam, Madura, Tanjore, Kombakonum, Chillambaram, Congeveram, and Bijanagar. I then proceeded to Kalburgah in the Nizam's Dominions, and on to Bombay, seeing Bijapur, Poona, Karli, Ambernath, Elephanta, and Ahmedabad. Passing up the Rajputana State Railway, I visited Mount Abu, Ajmir, Ulwar, Jaipur, and Delhi, returning to Simla on the 16th April.

Preliminary reports.

7. From May I was engaged in compiling the preliminary reports on Madras, Bombay, Rajputana, Kalburgah, and Central India.

Delhi and Gwalior.

8. During July I inspected the Delhi walls and gates and the fortress at Gwalior, where Major Keith is employed on special duty, in renovating its ancient buildings.

9. During November I visited Lahore, in company with Mr. Heath, Executive Engineer, Archæological Division, Agra, in order to ascertain whether he could undertake to superintend repairs to monuments at Lahore and Delhi, in addition to his work in the North-Western Provinces.

10. The members of my establishment were uninterruptedly employed in fairing out plans and drawings up to

the end of November, when they accompanied me to Umballa, where during December and January 1882 I was busy with regimental studies previous to an examination for promotion to Major, held on the 30th and 31st of January. This greatly encroached on my tour season; but the draftsmen continued their work, a party proceeding on the 12th December to Madras to survey at Trichinopoly and Madura. Tour in 1882 shortened.

11. Leaving the remainder of the draftsmen at Umballa to continue their plans and fairing out, I proceeded to Peshawar, where I arrived on the 6th February, visiting Ranighat, Shahbazgarhi, the Karamar Hill, Bakshali and Takht-i-Bahi in Eusofzai, and Charsuddah in Hastnagar. Peshawar District.

12. After Eusofzai I proceeded to Nur Mahal, near Phillour, and then to Gwalior, Agra, Buddha Gya, and *vid* Calcutta to Madras, Madura, Bombay, Indore, Ajmir, and back to Simla on the 7th April. From the 24th April to the 7th June I became occupied with the theoretical subjects obligatory in the examination for promotion to Major. Tour in Bengal, Madras. Central India, 1882.

13. Having briefly sketched out the way in which my time has been employed since April 1880, I venture to submit some preliminary and general observations on the subject of conservation of national monuments; the various appendices particularise in detail what has been recommended to the various Local Governments, Administrations, and Native States, and what are the steps that have been severally taken. Recommendations to Local Governments, &c.

CHAPTER I.

EARLY INVESTIGATORS, AND MEASURES UNDERTAKEN FOR THE PROTECTION AND REPAIR OF BUILDINGS—BETWEEN THE YEARS 1808 AND 1866.

Previous measures.

14. It will probably be neither out of place or uninteresting to trace the various steps that have led up to the present systems for archæological investigation, and for preserving the structures themselves, or records of their architecture.

Early investigations.

15. During the infancy of British rule, officials, although fully occupied with the arduous tasks of government, found leisure to investigate local antiquities, and the names of Todd, Wilson, Prinsep, Buchanan, Kittoe, in Bengal; of Mackenzie, Elliot, in Madras; and of Sykes, Forbes, Wilson, Bhaudaji, in Bombay, are illustrious examples of such individual labours.

Early Eastern travellers.

16. The accounts of the early Eastern travellers are also so numerous and interesting, that I have ventured to place in the Appendix (see M, pages lxxvi to cv) a Catalogue of Works referring to Indian and Oriental Architecture, Art and Archæology.

Care of monuments in early days.

17. A sentiment of respect for the monuments of the past has not unfrequently been exhibited by the early Governors General. India is indebted to the Earl of Minto, the Marquess of Hastings, Lord Amherst, Lord Auckland, Lord Canning, and others, for the present state of preservation of some of the most beautiful monuments of Indian antiquity.

Taj, 1808.

18. In 1808, during the administration of the Earl of Minto, a Taj Committee was appointed, and Lieutenant Taylor was entrusted with repairs, which exceeded Rs. 1,00,000 in cost.

Fatehpur-Sikri and Sikandra, 1815.

19. In 1815 the Marquess of Hastings directed repairs at Fatehpur-Sikri and Sikandra; and in the following year the local agents at Agra were instructed to negotiate for the surrender of the lease of the grounds belonging to the Tomb of Akbar, and to propose a small establishment for keeping

the grounds; whilst Lieutenant J. Taylor was sent to reside at Sikandra for the purpose of preserving the tomb from ruin.

20. In 1816 the pensions of deceased kadims at the Taj were discontinued, and the fruit grown in the gardens was sold for the benefit of Government. Taj, 1816.

21. In 1826 the Kutub Minar was repaired, by order of the Government of India, by Major Smith, R.E. (Governor General Earl Amherst). Kutub Minar, 1826.

22. Between the years 1828 and 1835, when Lord William Bentinck was Governor General of India, the Taj was on the point of being demolished for the value of its marbles; and it was in 1831 proposed to lease the Sikandra Gardens to the Executive Engineer at Agra for the purposes of speculative cultivation. Taj, 1828-35.

23. In 1840 the local agents at Agra reported that the Taj revenues from villages yielding Rs. 4,200 per month were at the time of the British occupation applied to the general purposes of the State. Taj revenues.

24. During the Governor Generalship of Lord Auckland, in 1842, the local agents at Agra were directed to assume charge of Itmad-ud-Dowlah's Tomb, and keep it in repair. Itmad-ud-Dowlah's Tomb, 1842.

25. In 1843 Viscount Hardinge authorised the local agents at Agra to disburse Rs. 150 for the repairs of Itmad-ud-Dowlah's Tomb; and in 1847 his Government directed the Collector to bring the villages connected with the shrine of Shaikh Salim Chisti at Fatehpur-Sikri on to the rent-roll of the district. Tomb of Salim Chisti, Fatehpur-Sikri, 1847.

26. About 1848 Captain Gill was employed in making faithful transcripts of the wonderful paintings in the Caves of Ajanta. Copies of Ajanta paintings, 1848.

27. In 1848 Sir Bartle Frere, then Resident at Satara, instituted a survey of the Muhammadan remains at Bijapur, and Captain Hart, of the Bombay Engineers, had charge of the work. Bijapur, 1848.

Salim Chisti's Tomb, 1850.

28. During Lord Dalhousie's time the Lieutenant-Governor of the North-Western Provinces, in 1850, sanctioned the following distribution of the endowments connected with the Tomb of Shaikh Salim Chisti at Fatehpur-Sikri :—

	Rs.	
For festivals	2,327	
Repairs	1,500	
School	600	
Divisible among the Shaikh's descendants ...	6,066	
Total ...	10,493	per annum.

Buildings at Tatta in Sind, 1855.

29. At the instance of Mr. J. Gibbs, then Assistant Commissioner, and Sir Bartle Frere, then Commissioner of Sind, in 1855, Lord Elphinstone, Governor of Bombay, sanctioned Rs. 5,000 towards the repairs to the Jama Masjid and tombs at Tatta, in Sind (see page xxxvii of the Appendix).

Jama Masjid, Delhi, 1857.

30. Lord Lawrence in 1857 (Governor General Lord Canning) prevented the Jama Masjid, Delhi, from being razed to the ground.

Colonel Cunningham's survey, 1862-65.

31. Major-General (then Colonel) Cunningham was appointed Archæological Surveyor in 1862—a post he held up to 1865.

Bijapur repairs, 1863.

32. In 1863, Sir Bartle Frere, when Governor of Bombay, sanctioned an annual grant of Rs. 2,480 for the repairs of the Bijapur remains.

CHAPTER II.

SYSTEMATIC INVESTIGATION OF ARCHITECTURE AND ARCHÆOLOGY, SHOWING THE STEPS THAT WERE TAKEN FOR PREVENTING THE DEMOLITION OF MONUMENTS AND FOR SECURING THEIR CONSERVATION BETWEEN THE YEARS 1866 AND 1881.

33. In 1866 and 1867, the late Sir Henry Cole, then Secretary of the Science and Art Department and Director of the South Kensington Museum, London, instituted enquiries as to the means of systematically collecting illustrations of Indian architecture (in lieu of originals) by means of photography, plans and casts (see Appendices A and B, page i); and a lecture on the study of Indian architecture was read by Mr. J. Fergusson at the Society of Arts, London, on the 19th December 1866, Sir James Fergusson being in the chair (see page lxxvi of the Appendix, M).

Sir Henry Cole, 1866.

Mr. Fergusson's lecture, 1866.

34. The following year at the Paris Exhibition of 1867, a large collection of photographs created great interest for Indian architecture, and during this Exhibition a Convention was entered into by the several Princes of the reigning families of Europe, whereby they agreed mutually to assist the museums of Europe in procuring casts and copies of national objects for the promotion of art (see Appendix C, page iii).

Convention for the interchange of reproductions.

35. The first movement for the systematic preservation and illustration of monuments in Bombay was directed by the Government of India in August 1867; repairs of buildings at Ahmedabad were taken in hand—a sum of Rs. 5,300 being sanctioned for the Tomb of Shah Alam, and Rs. 5,000 for repairing the buildings at Sirkhej.

Repairs at Ahmedabad, 1867.

36. In 1868 Sir Stafford Northcote suggested to the Government of India to conserve and record the most remarkable monuments in the country, and enclosed in his despatch a letter from the Director of the South Kensington Museum asking for greater details regarding the date, construction, ornamentation, and condition of ancient buildings. Survey

Surveys in Madras, Bombay, Bengal, and North-Western Provinces, 1868.

parties were accordingly sanctioned for Madras, Bombay, Bengal, and the North-Western Provinces, and the following steps were taken :—

Madras, 1868.

37. In Madras, Lord Napier initiated the restoration of Trimal Nayakka's Palace, and its utilisation for public offices. Mr. Chisholm prepared estimates and plans.

Bombay, 1868.

38. In Bombay, a party from the School of Art (under Mr. Terry) made casts at the Temple of Ambernath.

Bengal, 1868.

39. In Bengal, the Calcutta School of Art (Principal Mr. Locke) prepared casts of temples in Cuttack.

N. W. P., 1868.

40. In the North-Western Provinces an archæological survey was instituted (see Appendices D, E and F, pages v to xii).

Sanchi Tope, 1868.

41. The Government of Sir John Lawrence prevented the demolition of the Sanchi Tope Gateways in 1868.

Ahmedabad repairs, 1869.

42. In 1869, Rs. 3,000 was sanctioned by the Bombay Government for the repair of the Palace and Tank at Sirkhej, Ahmedabad.

Sanchi casts, 1870.

43. In 1870, in Lord Mayo's time, casts were made of the Eastern Gateway of the Sanchi Tope and other sculptures (see Appendix F, page xiii).

Kutub and Fatehpur-Sikri casts, 1871.

44. In 1871, casts were made at the Kutub, Delhi, and at Fatehpur-Sikri, Agra.

Director General of Archæology.

General Cunningham was appointed this year to be Director General of Archæology.

Ahmedabad repairs, 1871-72.

45. In 1871-72, Rs. 2,000 were expended by the Bombay Government on the Tomb and Mosque of Rani Sipri, Ahmedabad.

Gingi Fort, 1872-73.

46. In 1872-73 repairs were carried out to the old Fort and Temples at Gingi in South Arcot, Madras.

Copies of Ajanta paintings, 1872.

47. In 1872, Mr. Griffith, of the Bombay School of Art, made copies of the coloured decorations in the Caves of

Ajanta. (Those done by Captain Gill had been burnt at the Crystal Palace fire.)

48. In 1873, Lord Northbrook promulgated an order that buildings of interest should be cared for, as a matter of duty, by all Local Governments. Lord Northbrook's General Order, 1873.

Dr. Burgess was this year appointed Archæological Reporter to the Bombay Government. Archæological Survey, Bombay.

49. In 1874 preservation of historical monuments in India was advocated by a memorial signed by— Memorial in favour of preservation, 1874.

Duleep Singh.	W. M. Gomm.
W. Ebor.	Arthur Gordon.
Devonshire.	A. Grote.
Lothian.	A. B. Beresford Hope.
Salisbury.	Henry Holland.
Ripon.	Charles Kingsley.
Derby.	James Ph. Lacaita.
Stanhope.	J. G. Shaw-Lefevre.
Carnarvon.	Stafford Northcote.
Stanley.	Lawrence Peel.
Russell.	A. P. Phayre.
Lawrence.	Edward Ryan.
Napier and Ettrick.	Albert Sassoon.
Halifax.	G. Gilbert Scott.
Edward Colebrooke.	Arthur Stanley.
James Fergusson.	George Edmund Street.
H. B. E. Frere.	Meadows Taylor.
J. A. Froude.	Edmund Thomas.

C. E. Trevelyan.

50. A special Archæological Division was established at Agra in 1875 by Sir John Strachey, Lieutenant-Governor of the North-Western Provinces (Viceroy Lord Northbrook). Sir John Strachey's Archæological Division, 1875.

51. In 1876-77, the Local Fund Board, North Arcot, Madras, allotted Rs. 1,000 for the repair of the old Palace, Chandragiri. Palace at Chandragiri, 1876-77.

52. About 1877, Colonel Sankey, R.E., carried out some repairs to the famous temple of Hallabid in Mysore, and a Repairs in Mysore, 1877.

sum of about Rs. 6,000 was spent. About Rs. 3,000 were also spent in repairing the porch of the beautiful temple at Somnathpur in Mysore.

Mr. Sewell at Amravati, 1877.

53. In May 1877, Mr. R. Sewell superintended some excavations at the Amravati Tope, Madras.

Ruins at Bijanagar, 1878.

54. In 1878 removal of vegetation was ordered by the Madras Government from the ruins of Bijanagar (Hampi), Madras.

Vellore Fort, 1878.

55. The idea of restoring the temple in the Vellore Fort was initiated in 1878 by the Duke of Buckingham.

Lord Lytton's grant to the N. W. P., 1879.

56. A sum of 3¾ lakhs of rupees was in 1879 contributed by Lord Lytton's Government towards the restoration of buildings in the North-Western Provinces.

Major Mant, 1879.

57. In 1879, Major Mant was appointed Conservator of Archæological and Architectural Remains in Bombay by Sir Richard Temple, and reported on the buildings at Ahmedabad.

Proposed appointment of a Curator in India, 1880.

58. Lord Lytton's Government in 1880 proposed the appointment of a Curator of Ancient Monuments in India to the Secretary of State (the Marquess of Salisbury).

Duke of Buckingham at Bijanagar in 1880. Excavation at Amravati, 1880.

59. In 1880, the Duke of Buckingham inspected the ruins at Bijanagar, Madras, and ordered some preservative measures. His Grace also ordered the completion of the excavations, commenced in 1877, at the Amravati Tope, Madras.

Bengal and Buddha Gya.

60. Sir Ashley Eden in 1880 commenced the restoration of the Great Buddhist Temple at Buddha Gya, Bengal.

Curator appointed by Lord Ripon, 1881.

61. The Marquess of Ripon in 1881 appointed the Curator of Ancient Monuments in India.*

Madras Archæological Survey.

Dr. Burgess was this year appointed to the Archæological Survey of Madras.

* The following special officers are now engaged on works of conservation :—
Bengal.—Mr. Beglar, Executive Engineer, Buddha Gya.
North-Western Provinces and Oudh.—Mr. Heath, Executive Engineer, Archæological Division.
Punjab.—Lieutenant Abbott, R.E., Assistant Engineer.
Central India.—Major Keith, Assistant to the Curator of Ancient Monuments.
Madras.—Mr. Black, Assistant Engineer.

CHAPTER III.

GENERAL OBSERVATIONS ON THE CONSERVATION OF HISTORICAL MONUMENTS.

62. It may be said that investigation has from the earliest times received on all sides great attention and encouragement. So much, however, remains to be done, particularly in the direction of accuracy, and the interest so increases with the increasing knowledge, that preservation of historical landmarks acquires an importance most difficult to ignore. Investigation greatly encouraged.

63. Experience has shown that the keenest investigators have not always had the greatest respect for the maintenance of monuments. Archæological research has for its object the elucidation of history, and to an enthusiast the temptation to carry off a proof of an unravelled mystery is undoubtedly great. If there were no such things as photographs, casts, and other means of reproducing archæological evidence, the removal of original stone records might perhaps be justified. Investigation.

64. Sometimes, indeed, the removal of ancient remains is necessary for safe custody; and in the case of a foreign country we are not responsible for the preservation *in situ* of important buildings. We are not answerable for keeping Grecian marbles in Greece; neither were we concerned for the rights of Egypt when Cleopatra's Needle left Alexandria for the Thames embankment. Justifiable removal of remains.

65. In the case, however, of India—a country which is a British possession—the arguments are different. We are, I submit, responsible for Indian monuments, and that they are preserved *in situ*, when possible. Moreover, as Mr. Fergusson remarks, Indian sculpture is so essentially a part of the architecture with which it is bound, that it is impossible to appreciate it properly without being able to realise correctly the position for which it was originally designed (see Appendix B, page iii). Preservation *in situ* in India.

66. To meet the wants of museums out here and in Europe, perfect *facsimiles* can take the place of the originals (see *Facsimiles* of sculptures.

Appendices A, B and C, pages i to v). Casts are made so exactly like the sculptures, that no argument against them is of force. I hope before long the Supreme Government will announce all over India the acceptance of the "*in situ, if possible, principle.*" Each case should be judged on merits; but I submit that no demolition of importance should be allowed without the express concurrence of the Governor General in Council.

Stonehenge. 67. The removal, for instance, of Stonehenge to London would, I imagine, provoke considerable excitement in England, and be condemned by a majority in the scientific and artistic world.

Custody, &c. 68. Outside the professional and technical remedies necessary to restore and repair national monuments, there are the important but simple measures of custody and the removal of over-busy natural vegetation. These remedies should, I submit, be strongly recommended, by Local Governments and Administrations, to all district officials, who might, with great advantage, be invited to submit their proposals for providing custodians, wherever they consider them advisable.

Local interest. 69. The encouragement of local interest in monuments is the more essential to secure the fabrics from damage, as without widespread organisations no measures for repairs or restorations can combat with the peculiar tropical conditions tending to damage every kind of building and structure in India.

Publication of drawings. 70. In November 1881, I addressed the Supreme Government on the subject of the reproduction of architectural illustrations, and asked for a sum of Rs. 5,000 in order to get a selection of the drawings under preparation repeated by the best processes for publication (see page lxxiv of the Appendix). Government in reply stated that no large or expensive work was contemplated, but sanctioned a sum of Rs. 5,000 for the reproduction of some of the most finished drawings prepared in my survey for the preservation of any monuments of great importance, adding that the measure should be considered simply as an experiment.

Experimental reproductions of drawings. 71. The results of these experimental reproductions are submitted with this report, and will be referred to in the

detailed reports on the buildings in the various administrative areas. The memoranda drawn up by me at various times (see Appendices G and L, pages xvii and lxxiv) show the value I attach to such means for promulgating a knowledge of Indian art, and I can only hope that Government will deal liberally with the subject. Apart, however, from the value of illustrative matter in connection with the development of art, the publication of *accurate* plans and drawings of a neglected monument of interest and beauty is an important lever for securing a better state of things.

72. A sum of Rs. 50,000 was held in reserve by the Public Works Department in 1881-82 for grants-in-aid towards repairs, &c.; and in the civil estimates for 1882-83 there is a provision of Rs. 1,00,000 for the same purpose. It was further arranged that the former sum should be available for reappropriation. This is the more necessary, as hurry in spending an annual grant before the 31st March would certainly have a bad effect on the quality of work, which in an artistic building should be first rate. I hope, therefore, that similar arrangements will be made for all grants. In connection with the principle of applying these Imperial grants, there is a point which I strongly commend to the notice of Government. This aid should, I urge, be given *when necessary* to the *most important monuments of their class*. There are certain well-known structures and remains of imperial interest and importance, the conservation of which should be encouraged or provided for at the outset.

Imperial Budget grants.

Principle of applying Imperial grants.

73. If Local Governments and Native Rulers find it impossible to furnish the whole of the necessary funds, the sum required to make good the total necessary expenditure should, as far as possible, be forthcoming out of the Imperial Treasury.

Local funds.

74. The acceptance of this view would permit of a definite allotment to buildings admitted by the highest authorities to be of importance (see my report of 10th May,

Principle for the allotment of Imperial grants.

Appendix II, ii, page xxxiv), and I have no hesitation in recommending that the necessary funds be allotted on such a principle to the most important of the following not already provided for:—

75. *BUDDHIST MONUMENTS.*

Buddhist monuments.

Sanchi Tope—Central India, Bhopal State. Date of tope, 500 B.C.; of railing, 250 B.C.; of gates, 10-40 A.D. I made casts here in 1869, and had the place surveyed in 1880. Repairs have commenced under Sir Lepel Griffin, Agent to the Governor General in Central India. A great deal is required to be done.

Buddha Gya—Bengal, Gya District. Date of rail, 250 B.C.; of temple, 500 A.D. I have been here. The temple and rail have been restored by the Bengal Government at great cost, but well done. Executive Engineer—Mr. Beglar.

Bharhut Tope—Central India, Rewa State. Date of rail, 200 B.C. Part of the rail and one gate were removed to the Calcutta Museum by General Cunningham. I have not been to Bharhut yet.

Gandhara Topes and Monasteries—Punjab, Peshawar District. Sculptures date between 50 B.C. and 150 A.D. A great number of them have been excavated from the ruined buildings, and taken to Calcutta and Lahore. I have visited some of the most important localities. Repairs are not possible. The only remedy is to remove sculptures out of reach of the fanatical Pathan.

Manikyala Tope—Punjab, Rawalpindi. Date of the tope, first century A.D. It was repaired in 720 A.D. I saw this monument in 1868, but do not know its present condition.

Amravati Tope—Madras, Kistna District. Date of the railing, about 300-400 A.D. A large number of the railing marbles have been removed. I am about to inspect those that remain.

Sarnath Tope—Bengal, Benares District. Date of tope, about sixth century A.D. I have visited this. Repairs are under the consideration of the North-Western Provinces Government.

Bhaja Chaitya Cave—Western Ghâts, Bombay.

Bedsa Chaitya Cave—Western Ghâts, Bombay.

Nassick Chaitya Cave—Date 129 B.C., Western Ghâts, Bombay.

Ajanta Chaitya Cave—Date about 100 B.C., Nizam's Territory.

Karli Chaitya Cave—Date 78 B.C., Western Ghâts, Bombay. I have been to Karli. Some repairs have been sanctioned by the Bombay Government.

Ajanta Vihara Caves—Date 1-300 A.D., Nizam's Dominions. I have not been to Ajanta, but the Nizam's Government has fitted the caves with doors in order to keep out bees and animals and so preserve the old frescoes.

Ellora Vihara Cave and Kailas—Nizam's Dominions. I have not been to Ellora yet.

76. *JAIN MONUMENTS.*

Dilwarra Temples—1032 to 1247 A.D., Rajputana, Mount Abu. I have seen these. Repairs are very much required to preserve the beautiful marble sculptures. Jain monuments.

Temples at Parisnath—1439 A.D., Bengal, Bhaugulpore Division. I have not been here yet.

Temples in Fortress Gwalior—Central India. I have been here. Repairs have been executed by Major Keith, on special duty under the Agent to the Governor General, Central India.

Temples at Khajuraho—Central India. I have not been here yet.

Towers of Victory and Temples at Chittor—896 and 1439 A.D., Rajputana, Meywar State. I have seen Chittor, and have just examined the buildings for repairs (August 1882).

77. *HINDU OR BRAHMINICAL MONUMENTS.*

Hindu monuments.

Temple at Pandrethan—913 A.D., Kashmir. I surveyed this in 1868. It is sadly in need of repair.

Temples at Avantipur—875 to 904 A.D., Kashmir. I surveyed these. They should be looked after.

Temple at Marttand—Kashmir. I have surveyed this. It requires looking after.

Temples at Wangat—Kashmir. These require looking after badly. A survey was made in 1868.

Seven Pagodas—Madras, Chingleput. I have seen these; they require more remedies. Some have been already executed by the Madras Government.

Temple in the Vellore Fort—Madras, North Arcot District. Has been well restored by Captain McNeil Campbell, R.E. I have seen this.

Temples at Srirangam—Madras, Trichinopoly District. Are endowed and used. I have seen them, and surveyed the buildings. They require considerable remedies.

Temple at Madura—Madras, Madura District. Is endowed and used. I have surveyed this, to show needful repairs.

Temple at Ramissiram—Madras, Madura District. This has been surveyed for repairs.

Temple at Tanjore—Madras, Tanjore District. I have seen this. It is kept in fair order by the Princess.

Temple at Kombakonum—Madras, Tanjore District. I have seen this; it requires attention. It is endowed and used.

Temples at Chillambaram—Madras, South Arcot. Are endowed and used. I have been here. The buildings require attention.

Temples at Congeveram—Madras, Chingleput District. I have been here. The temples are endowed and used; they require attention.

Temples and Buildings at Bijanagar (Hampi)—Madras, Bellary District, 1510 A.D. These are deserted, and call for considerable attention. I have inspected the buildings, &c. The Governor of Madras, the Right Honourable Mr. Grant Duff, is about to visit them.

Temples at Nagda near Udaipur—Meywar, Rajputana. Very fine specimens of Jaina styles. I have just seen these.

Temples at Hallabid—Mysore State, 1115 A.D. Partly repaired by Colonel Sankey, R.E., in 1877. I have not been here yet.

Temple at Somnathpur—Mysore State, 1043 A.D. Partly repaired. I have not been here.

Temple at Baillur—Mysore State, 1114 A.D. I have not been here.

Black Pagoda, Kanarak—Bengal, Orissa; date ninth century. Measures needed. I have not been here yet.

Teli-ka-Mandir (Temple), Fortress Gwalior—Central India; date tenth century. I have been here. The building is in course of complete repair under Major Keith and the Military Works Branch, Public Works Department.

Benares Temples and Ghats—I have been here; the buildings now remaining are mediaeval in date; the temples are in use and looked after by the Natives, but many require attention in respect of cleanliness and repair. Some of the ghâts have fallen into ruin through bad foundations on the river bank.

Temple at Bindrabun—North-Western Provinces, Muttra District. Repairs commenced by Mr. Growse are still in progress under the Executive Engineer, Archæological Division, North-Western Provinces, Mr. Heath, but lately the priests whitewashed the interior. I saw the building before repairs in 1868.

Amritsar Temple (Sikh). I have seen this. It is repaired very well by the Sikhs. A complete survey has been made at the request of Sir Robert Egerton, the late Lieutenant-Governor of the Punjab.

78. *HINDU PALACES.*

Hindu palaces.

Madura—Madras. Very fine building. Is being repaired for offices under Mr. Chisholm, Consulting Architect to the Madras Government. I have seen this.

Tanjore—Madras. Used by the Princess of Tanjore. I have seen this.

Gwalior Fortress—Central India. Fine buildings, in course of being repaired under Major Keith, on special duty under the Agent to the Governor General in Central India. I have inspected this often. Plans are making in my office.

Udaipur—Meywar, Rajputana. Used by the Maharana. I have just inspected this.

Ulwar—Rajputana. Used by the Maharao-rajah. I have seen this. Nothing done as yet.

Amber—Rajputana, Jaipur. Requires repairs. I have seen this. I regret to record that the Palace was whitewashed to receive the Viceroy in 1881. No repairs have been done as yet.

Dig—Rajputana, Bhartpur. In good order. I surveyed this in 1868.

79. *MUHAMMADAN MONUMENTS.*

Muhammadan monuments.

Kutub Buildings—Punjab, Delhi District. Require some attention. I made casts here in 1870. Surveys of some of the buildings have been made. Much required to be done.

Mosque at Ajmir—Rajputana. Has been partly repaired. Slight repairs still wanted. I have often inspected this building.

Mosques at Jaunpur—North-Western Provinces, Jaunpur District. I have been here. Repairs are sanctioned under Mr. Heath, Archæological Division, North-Western Provinces.

Ahmedabad Buildings—Bombay, Ahmedabad. I have seen these. Repairs were commenced in 1867 under the Collector, Mr. Borrodaile. They require and thoroughly deserve systematic repair.

Mandu Buildings—Central India, Dhar State. I have inspected these and had a survey made. They require systematic repairs, of which the Maharaja has already initiated some.

Gaur Buildings—Bengal, Malda District. I have not been here yet. The jungle was some time ago cleared by Government. A good deal is required to be done.

Kalburgah Buildings—Nizam's Dominions. I have inspected these. The Nizam's Government has sanctioned repairs.

Bijapur Buildings—Bombay, Kaladgi District. I have inspected these. Repairs were initiated by Sir Bartle Frere when Governor of Bombay in 1863. The citadel buildings are now being converted into offices for the district by Mr. Reinold, Executive Engineer, Kaladgi. Much remains to be done to the architectural monuments.

Mosques and Tombs at Tatta—Bombay, Sind. I have not yet seen these. They were repaired in 1855 under the auspices of Mr. Gibbs.

Shir Shah's Tomb at Sasseram—Bengal, Shahabad District. Repairs commenced by the Bengal Government. Executive Engineer—Mr. Beglar.

Akbar's Tomb, Sikandra—North-Western Provinces, Agra District. I have often seen this. It has been renovated by Mr. Heath, Executive Engineer, Archæological Division, North-Western Provinces, and the walls and gates are nearly complete. Mr. Lawrence, Collector of Agra, has restored the grounds.

The Taj, Agra—North-Western Provinces, Agra District. I have often seen this. It has been perfectly restored by Mr. Heath, Executive Engineer, Archæological Division, North-Western Provinces. The gardens are in first-rate order under the Collector of Agra, Mr. Lawrence.

Jahangir's Tomb, Lahore—Punjab. I have surveyed this. Repairs that were urgently wanted have been commenced by the Punjab Government.

80. *MUHAMMADAN PALACES.*

Muhammadan palaces.

Agra—North-Western Provinces. I submitted a report to Sir William Muir in 1868. The buildings of interest have been completely repaired by Mr. Heath, Executive Engineer, Archæological Division, North-Western Provinces.

Delhi—Punjab. A great deal has to be done. I have surveyed some of the buildings. Repairs have commenced.

Lahore—Punjab. A great deal has to be done. I have had some of the buildings surveyed.

Jahangir's Palaces in the Daolat Bagh at Ajmir—Rajputana. I am having a survey made of the buildings to show needful repairs.

Akbar's Palace at Fatehpur-Sikri—North-Western Provinces. I surveyed this in 1869, and made casts in 1871. Repairs have since 1875 been carried out under Mr. Heath, Executive Engineer, Archæological Division, North-Western Provinces, and are nearly completed.

81. As already stated in my report (Appendix H, page xx, paragraph 2), architectural monuments have suffered, and are suffering, more from the acts for which Government has been responsible than from the natural decay and ruin produced by rain or vegetation in the jungle and deserted places. The remedies, which are to be applied at Lahore and Delhi, will make good damage done for the most part in the early days of British rule.

82. A list of interesting British monuments worthy of preservation is given in the Appendix N, page cvi; also a list of some ancient and modern forts and citadels in India in Appendix Y, page ccxvi.

H. H. COLE, *Captain, R.E.,*
Curator of Ancient Monuments in India.

December 26th, 1882.

APPENDIX.

A

Extract from a Memorandum offering suggestions for collecting information about the ancient architecture of India, by Lieutenant H. H. Cole, R.E., dated Naini Tal, June 1867.

A collection of records of Indian architecture could only be represented in England, by photographs, drawings, plans, casts and written descriptions.

In order to render the collection purely instructive, details of buildings should be accurately represented.

2. Apart from the value of representing Indian architecture for study in England, there would be a good opportunity for representing, at various museums in India, a History of Native Architecture; the education of natives, whose modern art is daily becoming more and more corrupted and all originality and identity being lost, is a matter worthy of serious consideration.

B

Memorandum by James Fergusson, Esq. (1868), regarding objects in India of which it is desirable casts should be obtained.

There are in the Museum of the Royal Asiatic Society at Calcutta and the Central Museum at Madras a considerable number of pieces of sculpture, some of great beauty and interest, of which it would be desirable casts should be obtained for museums in this country. There must be parties on the spot who know which are best and most suitable,* but it strikes me as extremely desirable that the parties who are to be employed in casting the larger objects *in situ* should first be employed on these smaller antiquities in the local museums.

In the Lahore Museum there is a considerable collection of sculptures obtained from Topes in Afghanistan, principally from the neighbourhood of Peshawar, of the Bactro-Indian period, which are of extreme beauty and interest. I should like to see the originals sent to this country. The next best thing, of course, would be casts of them.

I am not aware what antiquities may be collected in any museum in Bombay, but I fancy there must be a considerable number, some of which at least may be worthy of being so multiplied.

Bengal.—The objects in this Presidency of which, in my opinion, it would be most desirable to obtain casts, are some of the sculptures in the caves at Udyagiri in Orissa, not far from Cuttack.

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* If any of the sculptures or inscriptions from the Amravati Tope which were deposited in the Calcutta Museum by Colonel Mackenzie are still there, casts of them would be most desirable to complete the collection here.

The two best are the bas-reliefs in the Jodev and Ganesh Garbha Caves. These are figured in the Journal of the Asiatic Society of Bengal, vol. vii, pls. xiii and xliv. They are about 3 feet in height, and the one 20, the other, I guess, 30 feet in length. They are placed under cover in verandahs about 7 feet from the ground, and therefore very accessible and, being in low relief, easily cast.

There are other sculptures in other caves in this locality which may be worthy of being cast.

These two were the only caves accessible when I was there, and they are among the oldest and most interesting objects in India. They probably date before the Christian era.

The black Pagoda at Kanaruc is not far from these caves, and is one of the best and most elaborately sculptured monuments in India. If a party were in that neighbourhood and had time they might find numerous objects in that now ruined temple worthy of being cast. It is impossible without photographs or drawings to specify which; but any person in charge of the party ought to have sufficient knowledge of the subject to fix on the best.

Near Ratrapore there is a temple some of the sculptures of which are figured J. A. S. B. vii, pl. xxxii., which from their style are well worthy of being cast; and if access can now be obtained to the precincts of the old Great Temple at Bhuvaneswar, there must be numerous objects within its walls worthy of being cast.

So far as we now know, it is the oldest *Hindu* temple in India, and consequently any information regarding it must be most valuable.

This part of Orissa is full of antiquarian interest, and a party could easily find any amount of employment. So far as I can judge, their relative interest is in the order in which I have named them.

Next in interest to these Cuttack sculptures are the pillars and remains of the rail that once surrounded the Bo Tree at Boodh Gya in Behar. Some of these are built into the courtyard of the Mohunt's house. Others form a sort of porch to the present temple, and some are, I believe, *in situ*. Those which are sculptured are equal in beauty and interest to anything in Bengal.

These pillars are not large—from 6 to 8 feet in height—and could easily be cast whole.

There are also numerous fragments of ancient sculpture in the neighbourhood of Boodh Gya which are worthy of being cast, but it would require discrimination to say which. The rail is of surpassing interest. It would suffice for the present to photograph the others.

Agra and Delhi.—I am not aware of any objects of Hindu antiquity near these cities which it would be worth while to cast, unless the fragments of the Buddhist rail discovered by General Cunningham at Muttra have been collected in some local museum (Agra?). If casts were taken of them, they would be of great interest.

Among the Mahomedan remains there is little, if anything, after the death of Akbar (A.D. 1605), which is worthy of attention in this respect. After that period inlaying became the principal means of ornamenting, and that cannot be expressed by casts. At the Kootub at Delhi, however, and in the old Pathan tombs and mosques there are carved details of Saracenic ornamentation equal to any found in any part of the world, and the carved geometric ornamentation of Akbar's buildings, both at Agra and Fatehpur Sikri, are unsurpassed of their class. These are all, however, only parts of large architectural designs, and unless copied on a very extensive scale would fail to reproduce the original effect. If, however, casting is undertaken in the North-West, a few small panels and details might easily be selected for experiment at least.

Sanchi.—There is no monument in the Central Provinces of which it would be so desirable to obtain casts as of the gateways at Sanchi. Two of these are fallen, and the fragments on the ground are not only easily accessible, but could without difficulty be pieced together so as to make a complete restoration afterwards. If one only were undertaken, probably the southern would be the best. If part being still erect were no objection, the eastern is probably of greater interest.

There is also the gateway of the smaller Tope a few yards to the north of the great one, which is on a much smaller scale. Only one trilithon of this is standing, the rest in the ground. If the erect position of a part was no objection, its smaller scale would make this more desirable as an experiment. The sculptures are of equal interest to those of the others.

Bombay.—Some of the sculptures in the great cave at Elephanta are typical of their class, and of great interest to the study of Indian antiquity. The choice of those to be first operated upon would in a great degree depend on their state of preservation, and that can only be settled on the spot.

The double Elephant Capitals in the great cave at Karli are objects of great beauty and interest. One or two of the best of them ought to be cast, and also the capitals in front of the cave at Bedsa (J. B. B. R. A. S., Vol. I., p. 139).

These places are in the immediate neighbourhood of Bombay and easily accessible by railway, and with smaller details which would suggest themselves to a party on the spot, might easily fill up a season. If operations could be extended to Bejapore or Ahmedabad, there are infinite varieties of Saracenic details which it might be worth while to reproduce by casting. As most of these have been published in the two volumes of photographs bearing these names, any one may satisfy himself on these heads, and I therefore forbear to enlarge on them.

Madras.—I am very much at a loss to know what to recommend with regard to this Presidency. So far as I know, none of the sculpture of the great temples is of so high a character as to be worthy of study, apart from the buildings in which it is found, though very effective while *in situ*.

If a party could be detached to Belloor and Hullabeed (see volume of photographs of Dharwar and Mysore), they might find abundance of profitable employment; but this would probably be too much to attempt at first. Barring this, the desecrated temple in the fort at Vellore (now the arsenal) affords some of the best and most elaborate pillars of the southern style, and these would be extremely interesting in any collection as a means of comparison.

In conclusion, I beg leave to observe that, unless casts of sculpture *in situ* are accompanied by plans and measured drawings in elevation, they will lose half their value. Indian sculpture is so essentially a part of the architecture with which it is found, that it is impossible to appreciate it properly without being able to realise correctly the position for which it was originally designed.

I may also add that no party should be despatched on such an expedition unless accompanied by a photographer. Forty negatives will probably not cost more than one cast; and though they cannot supply its place, the larger field they cover and the number of incidental details they include render them invaluable adjuncts, and then also bring home to us an infinity of information regarding the antiquities which no amount of casting is likely to afford, in our days at least.

C

Convention for promoting universally Reproductions of Works of Art for the benefit of Museums of all Countries.

Throughout the world every country possesses fine historical monuments of Art of its own, which can easily be reproduced by casts, electrotypes, photographs, and other processes, without the slightest damage to the original.

(*a*) The knowledge of such monuments is necessary to the progress of Art, and the reproduction of them would be of a high value to all museums for public instruction.

(*b*) The commencement of a system of reproducing works of Art has been made by the South Kensington Museum, and illustrations of it are now exhibited in the British Section of the Paris Exhibition, where may be seen specimens of French, Italian, Spanish, Portuguese, German, Swiss, Russian, Hindu, Celtic, and English Art.

(*c*) The following outline of operations is suggested :—

i. Each country to form its own Commission according to its own views for obtaining such reproductions as it may desire for its own museums.

ii. The Commissions of each country to correspond with one another and send information of what reproductions each causes to be made, so that every country, if disposed, may take advantage of the labours of other countries at a moderate cost.

iii. Each country to arrange for making exchanges of objects which it desires.

iv. In order to promote the formation of the proposed Commissions in each country, and facilitate the making of the reproductions, the undersigned members of the reigning families throughout Europe, meeting at the Paris Exhibition of 1867, have signified their approval of the plan and their desire to promote the realisation of it.

The following Princes have already signed the Convention :—

Great Britain and Ireland	...	ALBERT EDWARD, Prince of Wales.
" " " "	...	ALFRED, Duke of Edinburgh.
Prussia	...	FREDERICK-WILLIAM, Crown Prince of Prussia.
Hesse	...	LOUIS, Prince of Hesse.
Saxony	...	ALBERT, Prince-Royal of Saxony.
France	...	PRINCE NAPOLEON (JEROME).
Belgium	...	PHILIPPE, Comte de Flandre.
Russia	...	THE CESAREWITCH.
"	...	NICOLAS, Duc de Leucthtenberg.
Sweden and Norway	...	OSCAR, Prince of Sweden and Norway.
Italy	...	HUMBERT, Prince Royal of Italy.
"	...	AMADEUS, Duke of Aosta.
Austria	...	CHARLES-LOUIS, Archduke of Austria.
"	...	RAINER, Archduke of Austria.
Denmark	...	FREDERICK, Crown Prince of Denmark.

Demi-official letter from His Royal Highness the Prince of Wales, to His Grace the Duke of Marlborough, Lord President of the Council of Education, dated 12th March 1868.

During the Paris Exhibition a Convention was entered into by the several Princes of the reigning families of Europe, whereby they agreed mutually to assist the museums of Europe in procuring casts and copies of national objects for the promotion of Art. I cannot doubt that the museums in this country will derive benefit from this Convention, and will be able to make a return to foreign

countries for the advantages which they may afford. I therefore transmit to your Grace, as Lord President of the Council, copies of this Convention, and I request that you will have the kindness to inform me whether you see any objection to the Lord President acting through the Science and Art Department in this country for the purpose of giving effect to it, so far as the United Kingdom is concerned.

Your Grace will perceive that the object contemplated by the Convention is identical with that for which an annual grant of money has been made for many years by Parliament to the Science and Art Department, and it is hoped that by the aid of this Convention far greater facilities will be obtained for the interchange of works of Art between this and other countries than have hitherto existed.

10, St. James' Square,
March 14, 1868.

SIR,

I have had the honour to receive your Royal Highness' letter of the 12th March, informing me that a Convention had been entered into by several Princes of the reigning families of Europe, whereby they agreed mutually to assist the museums of Europe in procuring casts and copies of national objects for the promotion of Art, and at the same time transmitting to me copies of this Convention, and enquiring if I see any objection to the Lord President acting through the Science and Art Department in this country for the purpose of giving effect to it, so far as the United Kingdom is concerned.

In reply, I beg leave to inform your Royal Highness that I shall have pleasure in acting in the manner proposed, so far as the institutions under the Science and Art Department are concerned; and that when called upon I shall be ready to communicate with other authorities having charge of objects of Art in the United Kingdom, with the view of obtaining any facilities which may be required by foreign countries.

I have, &c.,"
(Sd.) MARLBOROUGH.

His Royal Highness
The Prince of Wales.

D

Report on the Fort Buildings at Agra, by Lieutenant H. H. Cole, R.E., dated Cawnpore, 4th August 1868.

In accordance with the instructions conveyed in Resolution No. 3138 of 1868, dated 13th June, by His Honour the Lieutenant-Governor, North-Western Provinces, I inspected the buildings in the Fort at Agra, and have the following report to make :—

Report.

1. The buildings which should be preserved from decay are—

The Jahangir Mahal.	The Saman Burj.
" Diwan-i-Am.	" small mosque near the Diwan-i-Am.
" Khas Mahal.	" Moti Masjid.
" Diwan-i-Khas.	

And the Cupola and Chittore Gates in the Machi Bhawan should be removed and built up elsewhere in the Fort.

2. The Jahangir Mahal was built by Akbar, and consists of one pavilion, singularly elegant in design. It is of red sandstone, and all the ornaments are honestly carved in relief on the stone. The interior details are all Hindu, and characterised by that peculiar aversion to an arch which Akbar alone of all the Moslem monarchs seems to have adopted. Jahangir chose this building as the residence of his two Hindu wives, the princesses of Amber (ancient name for Jaipur) and Marwar. And this evidence of kindly feeling to the Hindus lends additional interest to the building, and affords sufficient reason for its maintenance as a historical as well as an architectural monument. At present it is little better than a ruin, which climate and neglect combine to make worse. The whitewash which is liberally laid on in the north court should be removed, and the whole of the existing stone-work rendered secure by iron cramps run with lead. I think that any attempt to restore the building would prove at once difficult and expensive, and that the work of maintenance should be limited to preserving the present standing parts, and no attempt made to replace the fallen stone-work which now lies heaped in the centre of the court. At present the rain finds easy access through upper windows on to the floor of the north gallery, and, percolating through the stone floor, has destroyed the coloured ceilings and produced great decay. Water oozes through the flat roof all round the central court; grass and weeds crop up everywhere; and the sweeper of a neighbouring sergeants' quarters finds the parapet of the roof overlooking the interior court a convenient asylum for all kinds of refuse.

Akbar, 1556-1605.

Jahangir, 1605-1628.

3. Close to and on a level with the roof of the Jahangir Mahal is a very interesting Hindu pavilion in fair repair. The whitewash should be removed, and the roof strengthened with cramps and cement.

4. Close to this are some tanks, which were used to fill the baths belonging to Shah Jahan's palace and harem, and to supply the palace fountains. There are several pipes leading from the side of the tank, above which the names of the baths or fountains they supply are carved in relief on circular discs of stone. These tanks should be kept in repair, and rendered accessible to the public.

Shah Jahan, 1628-1638

5. The Diwan-i-Am (or audience chamber) was built by Shah Jahan, and is now used as an armoury. To adapt it to the requirements of the latter, windows of a European pattern have been built in on the west front, and the whole of the interior whitewashed; so that little remains of its former splendour. It is, however, in good repair.

6. I now now come to the marble buildings—namely, the Khas Mahal, the Saman Burj (or harem), and the Diwan-i-Khas (or private hall of audience)—which, together with the Diwan-i-Am, formed Shah Jahan's palace, and were built by that Emperor in white marble, inlaid with precious stones. In front of the Khas Mahal is a garden, surrounded on three sides by colonnades not so remarkable for architectural beauty as for the extreme decay into which they have fallen. The marble building consists of three pavilions overhanging the river, and, together with its terrace and fountain, are in a fair state of repair, and require only to be carefully inspected and the commencement of ruin stayed. The baths on the west side should be preserved, and not suffered to follow the inevitable fate of the adjoining buildings round the garden, near which it is dangerous to stand.

7. Some steps in front of the Khas Mahal lead by underground passages in the direction of the well on the east of the Jahangir Mahal. These passages are blocked up now, but were no doubt used by the ladies of the harem to get to the well, which is very remarkable for the suites of apartments existing round the bottom and on a level with the water. The well and passages should be maintained.

8. The Saman Burj (or private apartments of the harem) overlooks the river. The hole made by one of Lord Lake's cannon-balls in 1803 may still be seen in the marble screen on the west. The beautiful polished marble pillars and elegant arabesques of flowers, inlaid with precious stones, have suffered much through the combined influences of time and the British soldier, the latter having extracted a great number of the stones, and therefore damaged the marble. As far as the safety of this building is concerned, I recommend that the pillars be strengthened with iron cramps and bands, and fallen pieces of marble renewed. I believe that Sir E. Leeds, the Executive Engineer, at one time recommended that the holes caused by the mischievous extraction of stones should be filled up with cement, to enable fresh damage to be discovered. I think, however, that the building would lose a great deal of its interest if this plan were adopted. It would not be so easy to form an idea as to what the inlaid work had been; and, moreover, the very fact of theft having taken place is evidence of the existence of stones sufficiently valuable to steal. These remarks apply equally to the Diwan-i-Khas, which has also been much damaged.

9. With reference to all the marble-inlaid work, I would recommend generally that decay be stopped as far as possible, but that the buildings should be left as much as practicable in their present state. Unless a complete work of restoration be entered into, it would be better to let the public see the buildings as they are, and to leave the softening influences of time to convey a full impression of respect for a byegone age. The inlaid work in the Diwan-i-Khas is very fine, and the building itself is in the best style of Shah Jahan's reign. This building is only accessible by a ladder from the Saman Burj; and when the tumble-down buildings of the Machi Bhawan have been removed or fallen in, there will be no communication, as now, with the Diwan-i-Am. Some means of approach should be provided for the public, and I think the best would be a staircase from the court of the Machi Bhawan. Overlooking the river on the terrace of the Diwan-i-Khas is a large black marble stone, broken at one corner. This is erroneously called 'Akbar's Stone,' and the *raised* inscription round the edge proves that it was for Salem, the son of Akbar, afterwards the Emperor Jahangir; and a more recent *cut* inscription bears the name of Jahangir, and the numerical value of the letters testify to 1605 as the date. The stone should be mended with iron bands (not bars put into its length, as before). The west gateway of the Machi Bhawan contains some handsome bronze gates which were brought by Akbar from the Fort at Chittore. These should be removed to the Diwan-i-Am.

10. The marble cupola on the east of the Machi Bhawan has been partly taken down, as a measure of safety. It was a work of Shah Jahan's time, and in design is a mixture of Italian and Muhammadan styles. This cupola should be removed to some convenient position in the Fort, as an evidence of the influence of Italian art on the art of Shah Jahan's time. Some deny that the Taj Mahal was designed by an Italian, but I think that the character of this cupola goes far to prove that Shah Jahan employed Italians in the decoration of his buildings. On the west of the Diwan-i-Am is a small white marble mosque, built on the roof of a red sandstone building. Formerly it was in communication with the Saman Burj by a screened passage, which passed along the back of the Diwan-i-Am and over the west buildings of the Angori Bágh. This mosque is in very fair preservation, and should be maintained.

11. The last building worthy of preservation is Shah Jahan's Moti Masjid, one of the most elegant mosques of his time. Its courtyard is of pure white marble, from the pavement to the domes. Vegetation is commencing to destroy the latter, and some cornices in the ceiling of the mosque have fallen down; otherwise the building is in a good state. The best way to secure the ceiling would be to render the roof above perfectly water-tight. The Moti Masjid cost Rs. 3,00,000, took seven years to build, and was completed in 1652.

E

Extracts from a letter from Lieutenant H. H. Cole, R.E., Superintendent, Archæological Survey, North-Western Provinces, India, to the Under Secretary of State for India, dated London, 24th November 1869.

In accordance with the instructions contained in your letter dated 20th August, I have the honour to submit a revised estimate for the work of casting one of the Sanchi Tope gateways, for the information of His Excellency the Governor General of India in Council. These gateways are of great size and of great interest, as their elaborate sculptures illustrate the history of a period which has few written records.

2. The services of one Corporal and two Sappers of the Royal Engineers have been placed at my disposal. These men are now learning how to take casts by means of Elastic Moulds, Piece Moulds, Clay Squeezes, Paper Moulds, and have been set to cast some pieces of Jain sculpture which embody all the usual difficulties to be met with in Indian carvings. I have also been myself mastering all the necessary practical details of these operations.

3. I have in this way been able to test the relative merits of the various processes as applied to the Buddhist sculpture at Sanchi, and am satisfied that the method of making elastic moulds with gelatine is the one which will produce the most satisfactory results, in respect of perfection of copy, as well as economy.

4. Piece moulding* is too laborious and expensive for so large a work: two whole cold seasons would not suffice to finish one set of moulds of the gateway.

Moulding with clay† is an imperfect method; it takes also too long: and moulding with paper is not only laborious, but does not produce clear or sharp repetition.

On the other hand, the gelatine method insures a most perfect facsimile and can be executed quickly—two qualifications which in the present instance are of paramount importance; firstly, because it is necessary that copies as perfect as possible should be produced for France, Prussia, London, Dublin, and Edinburgh (see extract from correspondence below ‡), and secondly, on account of the extent of the work to be accomplished in a limited time during the cold season.

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* What can be done with gelatine in one day takes 14 days to accomplish by piece moulds. The object will, moreover, be covered with seams or divisions, whilst with an elastic mould the object is cast solid in one piece.

† Clay squeezing occupies double the time taken by gelatine moulding, and produces only the roughest kind of casts.

‡ *Extract from letter No. 1043, from the Officiating Secretary to the Government of India, to the Agent to the Governor General in Central India, dated Simla, 29th June 1868.*

"5. I am to inform you that steps will be taken to obtain casts of some of the most interesting parts of the Tope, and it is the intention of His Excellency in Council to present a set of the casts to the French Government."

Extract from despatch No. 17 of 1869, from His Excellency the Governor General in Council, to Her Majesty's Secretary of State for India, dated 2nd March 1869.

"It has been brought to our notice that the Committee of the Council on Education in England has recorded a minute, a copy of which we now forward, on the subject of procuring, at the expense of the Science and Art Department, casts of certain portions of the Sanchi Tope, near Bhilsa, in order that three copies might be forwarded to the United Kingdom,—one for the Museum at South Kensington, one for the Museum at Dublin, and one for the Museum at Edinburgh."

Extract from a letter from the Secretary, Science and Art Department, London, to the Under Secretary of State, India Office, dated 11th February 1869.

"Mr. Cole informs Mr. Grant Duff that the Prussian Ambassador, instructed by his Government, has applied to the Department to ascertain the probable cost of one cast of the gateway of the Sanchi Tope, the cost of moulds being defrayed either wholly by the Science and Art Department or shared with the Indian Government."

5. Basing my calculations on known data, I find that three men of the Royal Engineers, aided by native modellers, will be wholly engaged during next cold season in obtaining one set of gelatine moulds of the Sanchi gateway.

6. These moulds will not keep, and must be cast from directly they are made.

7. Only one cast can be taken from each mould* and only one set of perfect cast can be produced, from which the necessary copies will have to be cast afterwards.

8. As regards the reproduction of copies, it must be remembered that five are required for Europe (France, Prussia, London, Dublin, and Edinburgh); and probably one, at least, for India. The question is therefore one of economy, time, and certainty of execution, and it will be best in respect of these to send the one cast or rather set of casts numbering about 50 pieces to England, and to reproduce the required number of copie in London, where contracts can be entered into.

9. Unless this were done, the reproduction would have to be delayed until the cold season of 1870, as moulding from fresh casts with gelatine could not be continued in the hot weather, it would also be very expensive to import from London to India all the plaster of Paris required for six copies † It must be borne in mind that plaster of Paris for casting must be of a superfine quality, and has to be imported from France or England, as no means exist in India for refining the native gypsum to the extent required [I believe plaster of Paris can now be produced in India—H. H. C, 18-7-82.]

10. The enclosed estimate has been framed to carry out the following course of action.

11. The men of the Royal Engineers will accompany me to Sanchi, *via* Calcutta, this being a more convenient route than *via* Bombay on account of the large quantity of materials that has to be taken, and on account of the existence of railway from Calcutta to Jubbulpore, whereas between Bombay and Jubbulpore there is only railway as far as Nagpur

12 During the months of December, January, February, and March, I propose to make one perfect cast [which will consist of about 50 pieces] of the Sanchi Tope gateway.

13. In order to utilise the services of the men of the Royal Engineers to the full, I propose that 2 native modellers from each of the Schools of Art of Calcutta, Madras, and Bombay be sent to aid and be instructed in the work of casting by gelatine. By this means it will probably be unnecessary to retain the services of the men of the Royal Engineers in India, as the native modellers will be competent to execute future casts and instruct others in the process

14. The one perfect series of casts having been obtained, I propose to return to England with the men of the Royal Engineers to fit the 50 pieces of the parent ‡ cast into their correct places, and to prepare all the necessary details for producing the number of copies from it, as well as erect one model copy.

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* When the plaster of Paris has been poured into the mould, it commences to harden, and in the act of setting generates heat, which melts the gelatine and destroys the sharpness of the mould, which cannot generally be used for a second cast

† At least 60 tons of plaster would be required The freight on this from London overland at £6 6s per ton would be £360, the freight on the 5 returned casts back to London 40 tons £240; total £600 To send the parent cast home for reproduction would cost, 3 tons £18. Amount thereby saved £552. These figures do not include the cost of packing the plaster in tin lined boxes

‡ The parent cast will have somewhat deteriorated in the process of repetition, as its surface will have been oiled to prevent the gelatine moulds from adhering.

15. The casts will first have to be laid down horizontally on the ground, as the pieces must not be joined, and cannot therefore be built up vertically, until after the moulds for reproduction have been made.

16. As I have already pointed out, the original gateway is of great size, measures upwards of 33 feet in height, and is covered from summit to base with the most elaborate sculptures. The accuracy of all the subsequent copies will therefore depend on that of the parent* cast, and I apprehend that my responsibility in the matter will have ended when the first series of pieces produced from the parent cast have been joined together and built up in their proper places, to serve as a type and model for the proper erection of the other copies.

17. The copy or copies for India can also be most economically produced in England, and on my return to India after the completion of the work in London, I could see that at least one copy was properly erected in India.

18. As the work connected with the casting of the Sanchi Tope gateway will extend into the financial year 1870-71, I have taken this opportunity of proposing that casts should be made during the cold season of that year of some of the Kutub Pillars at Delhi, and of some pillars and carvings in the palaces at Fatehpur-Sikri, which I have reason to believe will be required by the Science and Art Department for the South Kensington Museum.

19. The whole of the tools at Sanchi will be available for this work, as well as nearly the whole of the gelatine for making elastic moulds, and any surplus amount of plaster will also be serviceable.

20. For convenience and economy I have ordered boxes for the plaster of Paris, of such sizes as to hold the casts of the gateway when ready for removal to England. The cost of these boxes is somewhat high, but they have to be lined with tin to preserve the plaster.

21. The Peninsular and Oriental Steam Navigation Company have agreed to carry the whole cargo of plaster of Paris, gelatine, tools, etc., from London to Calcutta at the rate of £6 6*s.* per ton (the rate per ton by sailing vessel is about £6 15*s.*, by measurement 27*s.* per 40 cubic feet), a reduction more than of cent. per cent. on their lowest rates, and they further agree to bring back the parent cast of the gateway to England at the same rate, so that, although there has not been time to send the materials *viâ* the Cape, not much, if any, additional expense will have been occasioned by the necessity of using the overland route.

22. The question of restoring the fallen gateway of the Tope has formed the subject of some correspondence, and I believe that the matter rests as referred to in the following letter from H. Le P. Wynne, Esq., Under-Secretary to the Government of India, to the Agent to the Governor-General in Central India :—

"No. 1257, dated Simla, July 28th, 1868.

Sir,

I am directed to acknowledge the receipt of your letters marginally noted on the subject of the restoration of the Sanchi Tope gateways.

2. In reply, I am directed by the Viceroy and Governor General in Council to observe that, as it is in contemplation to despatch a special officer next cold weather, he will have full opportunity of investigating the question as to the possibility of restoring the fallen gateway. That officer will accordingly be charged with this duty also on his proceeding to Sanchi.

I have, &c.,

(Sd.) H. LeP. WYNNE,

Under-Secretary to the Government of India."

23. When I inspected the Sanchi Tope gateways in April last the south and west gateways were in ruins. I think, however, it would be possible to restore them if the Begum of Bhopal sent about 30 masons and bildars to work under my

* Vide note 1 on preceding page.

orders. [I found no time to do this during the casting, and had no funds for the purpose.—H. H. C.]

* * * * * *

26. In regard to the copy required by the Prussian Government, the Indian Government will determine if it shall be presented or charged for, and under any circumstances have it in their power to recover half at least of the total expense—that is, Rs. 26,949 out of Rs. 53,899—from the Science and Art Department. In reference to the dealing especially with foreign countries, I beg to refer to a Convention entered into with the various Princes of Europe for the exchanges of copies of Works of Art which has been printed and laid before Parliament. (See 15th Report of Science and Art for 1867, page 24, Appendix.) I append copies of this Convention printed by the Department. (See page iii.)

Revised Estimate for the year 1869-70.

Items.	£	s	d	Rs.	A.	P.	Rs.	A.	P.
MATERIALS REQUIRED FOR MAKING A CAST OF THE SANCHI TOPE GATEWAY.									
Plaster of Paris, superfine quality at £8 per ton, 8 tons	64	0	0						
Plaster of Paris, fine quality at £5 per ton, 12 tons	60	0	0						
One ton gelatine at 2s per lb.	224	0	0						
Tin lined boxes for packing	100	0	0						
20 gallons shellac at 5s a gallon ..	5	0	0						
40 gallons spirits at 1s 3d a gallon ...	8	10	0						
Tin cases for spirit and shellac at 1s. a gallon ...	3	0	0						
1 cask of soap . ..	1	0	0						
5 cwt iron cramps	3	10	0						
4 iron cramps	4	0	0						
4 brass pulleys	5	0	0						
Rope	10	0	0						
Tools, brushes, etc.	5	0	0						
24 copper pails for gelatine	24	0	0						
4 copper cauldrons	5	0	0						
1 cwt. gutta percha at 4s 6d. per lb.	25	4	0						
Total ...	547	4	0	......			5,472	0	0
Salaries	......			......			11,435	0	0
Travelling expenses—Carriage of materials ...	......			......			7,360	0	0
Landing charges in Calcutta, say ...	......			300	0	0			
26 tons from Calcutta to Jubbulpore, E.I.R., at Rs. 42 per ton	......			1,092	0	0			
Carriage of materials from Jubbulpore to Sanchi, 185 miles, 18 marches, 26 carts at Rs. 2 a day for 18 days	......			936	0	0			
							3,966	0	0
Amount sanctioned by Secretary of State for India for training Sappers in casting in England ...	353	0	0	3,530	0	0	3,530	0	0
Total ...	...			... ..			31,763	0	0
Contingencies ..	. ...			..			3,170	0	0
Grand Total ...	.. ...			...			34,933	0	0

Estimate for the year 1870-71.

Items.	Rs	A.	P	Rs.	A.	P.
PART I.—*For the first half of the year 1870-71*						
Carriage of cast of the Sanchi Gateway from Sanchi to Jubbulpore—12 carts for 18 marches at Rs 2 each	432	0	0			
Railway to Calcutta, 8 tons, Rs 42 per ton	336	0	0			
Freight from Calcutta to London, 8 tons at Rs 63 per ton	504	0	0			
Shipping and other charges in Calcutta, say ..	100	0	0			
				1,372	0	0
Travelling expenses				5,560	0	0
Reproduction of cast and six copies in England ..				10,334	8	0
Total .	..			17 266	8	0
Contingencies .				1,700	0	0
Grand Total				18,966	0	0
PART II.—*For the latter half of the year 1870-71*						
Cost of surveying the Kutub and other remarkable Delhi monuments, of casting some of the Kutub pillars and examples of Muhammadan architecture at the palaces of Fatehpur-Sikri .						
Materials, plaster of Paris, say ..	4,000	0	0			
Freight to and from England and general transport expenses	5,000	0	0			
				9,000	0	0
Photographic charges, say 25 negatives at Rs 50 per negative and 6 proofs ...	1,250	0	0			
				1 250	0	0
Salaries ..				6,538	8	0
Travelling expenses				2,410	0	0
Total .				10 228	8	0
Contingencies .	..			1,900	0	0
Grand Total				21,128	8	0

F.

Report by Lieutenant H. H. Cole, Superintendent, Archæological Survey, North-Western Provinces, for the year 1869-70, dated Camp Sanchi, February 1870.

In order to present a connected statement for the year 1869-70, it is necessary for me to give an outline of operations since my first connection with the Archæological Survey.

2. On September 1st, 1868, I left Cawnpore with two Native draughtsmen, and marched through Murree into Kashmir, and up to the middle of November was occupied in surveying the principal ancient Kashmirian temples. Mr. Burke, photographer

Survey of Kashmir Temples, 1868.

of Murree and Peshawar, accompanied me, and it gives me pleasure to state that he carried out his part of the work in a zealous and successful manner. On return-

Halt at Sialkot.

ing to India in November, I halted at Sialkot, in order to complete the rough drawings made in the field, also to await further orders.

3. The Government of the Punjab at first wished a continuance of opera-

Proposed survey in the Salt Range, Punjab.

tions in the Salt Range, where several ruins exist similar in character to those I had surveyed in Kashmir.

The Government of the North-Western Provinces, however, required my

Survey of buildings in neighbourhood of Muttra, N. W. P

services, and I left Sialkot for Muttra in order to survey some of the architectural buildings in that neighbourhood. Reaching Muttra on the 9th February 1869, I marched to Bindrabun and opened work at the ancient Hindu temple, called Munder Gobind Deoji. The Reverend Mr. Simpson, Chaplain of Muttra, had been appointed to take photographs, and by a mutual arrangement he visited my camps at Bindrabun, Dig, Goverdhun and Fatehpur Sikri, in order to take photographs of those particular portions in the buildings that would best illustrate their architecture. After Bindrabun I visited the temple at Goverdhun, and the palaces at Dig and Fatehpur Sikri in succession,—and completed 13 drawings, plans, and details of those buildings. Mr. Simpson took 58 photographs, and these illustra-

Publication of Muttra series at the India Office.

tions, together with descriptive notes, are being published in one volume, by order of the Secretary of State for India, at the India Office.

4. The Kashmir photographs and drawings (photographed) are also being

Publication of the Kashmir series.

published at the India Office in one volume, and this work forms the first in the series of volumes which it is proposed to publish in connection with the operations of the Archæological Survey. The illustrations are being produced from the original negatives in the Photographic Department of the India Museum by the "autotype process in carbon," and are therefore permanent. My drawings are also being there photographed for purposes of repetition, as well as for convenience to suit the size of the volume.

5. In March 1869, when at work at the palaces of Fatehpur Sikri, I received orders to hold myself in readiness to proceed to England for the purpose

Preparations for making a cast of one of the Sanchi Tope Gates.

of making arrangements for casting one of the stone gateways which surround the great Buddhist tope at Sanchi in Central India, and, in accordance with instructions, I proceeded to Sanchi in order to collect the necessary details concerning the nature and extent of the work.

6. On the 1st of May 1869 I left Bombay, and arrived in London on the 23rd of the month.

The Secretary of State for India sanctioned my engaging three sappers of the

Training of three sappers in different methods of casting.

Royal Engineers to be trained in the most recent methods of taking casts in plaster of Paris.

The authorities at the South Kensington Museum, London, kindly placed one of their casting workshops at my disposal, and I obtained permission to engage a Mr. Franchi to instruct the three sappers and myself in the various processes of moulding.

Mr. Franchi is frequently employed by the Kensington Museum authorities to take casts of foreign sculptures, and is one of the most expert modellers in London.

It was soon obvious to me that the method of making elastic moulds with gelatine was the most suitable for Indian sculptures, in respect both of economy and rapidity of execution, and the three sappers were set to make casts by this process of a series of Jaina sculptures that had been sent to the Museum by Sir Bartle Frere.

Elastic moulds of gelatine, the most suitable for casting Indian sculptures.

I then made an estimate for casting the Eastern Gateway of the Sanchi Tope, and obtained the sanction of the Secretary of State for India to the purchase of the necessary materials. In addition to the gelatine process, the sappers underwent instruction in piece-moulding, clay-squeezing, and gutta-percha moulding.

I was also occupied, during my stay in London, in making fair drawings from the rough field measurements and drawings of Kashmirian and Muttra buildings, and in arranging, in concert with Dr. Forbes Watson, of the India Museum, for the publication of the two series.

On the 20th October 1869 I left London, and arrived in Calcutta, accompanied by Sergeant Bullen and Corporals Heath and Jackson, of the Royal Engineers, on the 26th November.

Journey from London to Sanchi.

I remained in Calcutta until all the 88 boxes, containing 28 tons of material, had left Howrah for Jubbulpore; and on the 13th December I arrived at the latter place, and commenced transferring the boxes into country carts.

It was found that upwards of sixty carts would be required, and I was delayed until the 20th December at Jubbulpore until all had been procured. I then proceeded to march to Sanchi, reaching Damoh on the 24th December, Sagar on the 29th December, and Sanchi on the 7th January 1870. Here I found that the Begum of Bhopal had sent a Tahsildar to assist in procuring coolies, scaffolding, &c., and already a quantity of bamboos, rope, and other requisite material had been collected at the village.

Casting operations at Sanchi.

The tope is situated on a sandstone hill, some few hundred feet above Sanchi; and as there existed no cart road to the top, I had to engage a number of coolies to carry up the material. The carts containing the plaster of Paris, &c., arrived on the 10th January, and from this date until the 17th Corporal Jackson was engaged in having the boxes moved up the hill, whilst Sergeant Bullen and Corporal Heath, assisted by seven native modellers and two mistries, erected a scaffold round the Eastern * Gate of the Tope, and commenced cleaning the carved stone work which had been incrusted with vegetation.

The working tents were pitched close to the gate, and the boxes arranged in them as they came up the hill. On the 19th January the first cast had been made, and the work continued successfully from that date until February the 7th, when I estimated that, out of 737 square feet of carved work to be cast in order to produce a perfect copy of the gate, 477 square feet had been cast, leaving 260 square feet to be done. I also calculated that the average daily work of the whole party of sappers and modellers would be fairly represented by 18 square feet of casting in plaster of Paris.

Casting operacions at Sanchi.

The whole cast consists of 112 pieces, and the last pieces was completed on the 21st February.

* The eastern gateway, although in some respects less perfect than the northern, appeared to me to be the best to cast. The northern gate has a greater number of detached figures and animals on its superstructure, but the carvings on the piers are less sharp than the corresponding ones on the eastern gate. Again, the northern gate has a "lean forward," and is about one foot out of the perpendicular at the top; and as I was unprovided with strong chains to support the stone-work, it was more prudent to avoid risking any accidents by selecting to cast the more secure of the two gates.

The pieces composing the "parent" cast now have to be carefully packed for removal to England, and on arrival will be fitted together, previous to any steps for reproducing the requisite number of copies of the gateway. When the first perfect set of pieces have been reproduced, they will be built up to represent the original gateway to serve as a type for other copies, and I propose to have large-sized photographs taken of each piece of the cast to accompany the detail drawings of the other carved gateways round the Sanchi Tope.

Large-sized photographs of the casts.

The chief difficulty throughout the work was to make all the gelatine moulds before the weather became too hot. A dry atmosphere is more favourable than a damp one, and therefore a great difference in the dry and wet bulb thermometer readings renders a high temperature less powerful to affect the gelatine; but it may be roughly stated that without 12 hours with the thermometer below 80° the gelatine fails to obtain that elastic consistency which is so essential to the production of a good mould.

In order, therefore, to run a successful race with the daily increasing heat, it was necessary for each modeller to work his hardest; and I have pleasure in the special favourable mention of Sergeant Bullen, Corporals Jackson and Heath, R.E., who throughout the work displayed untiring energy; also, in stating that the under-mentioned native modellers worked well—S. Burnald and Púneswamy, from the Madras School of Industrial Art; Nobin Chander Múkerjí, Bonomali Pal, Khudiram Das, from the Calcutta School of Art; and Gúder, modeller from Agra.

7. During the casting operations Thákúr Dass and Habíbúla, the draughtsmen who accompanied me to Kashmir and Muttra, were employed in making detail drawings of the ruined southern and western gateways of the Tope. I propose to obtain permission to have these drawings published at the India Office to form Volume 3 of the Archæological Series. [These were used by Mr. Fergusson in his "Tree and Serpent Worship."—H. H. C.] The casting operations excited a great deal of interest among the natives round Bhopal and Bhilsa, and every day I received visits from large parties of natives requesting permission to look at the finished casts, which were drying in tents.

Drawings of sculptures of two fallen gateways of the Tope.

8. The expediency of restoring ruined buildings and keeping them in repair has engaged the attention of Government at various times.

Restoration and conservation of ruins.

In the majority of cases it would, perhaps, be more suitable to attend to maintenance rather than to undertake complete restoration. At first I was of opinion that the fallen gates of the Sanchi Tope could be restored (*i.e.* during the casting operations, but I had neither time nor funds—H. H. C.), but on more careful investigation I not only find that such a restoration would be very expensive on account of the great masses of stone composing the gate, but also extremely difficult, as in both gateways the piers, which would have to support the whole superstructure, were found on excavation to be split down their entire lengths and otherwise broken. The most to be done at Sanchi without going to great expense would be to conserve the carvings intact, and to prevent mischievous chipping off of heads of stone figures and animals. Steps should also, I think, be taken by the Begum to prevent the two standing gateways from falling, and to do anything reasonable that may tend to the conservation of the wonderful remains on the Sanchi hill.

In regard to the preservation or restoration of the buildings around Muttra, the Hindu temple at Bindrabun, known as Mandir Gobind Deoji, would require a complete restoration of the superstructure. Such a work from its size would entail very great expense. [This has since been restored by Mr. Heath,—

Restoration and conservation of buildings in the Muttra neighbourhood.

H. H. C.] An amalgamated list of architectural structures in the North-Western Provinces was prepared from lists furnished by Commissioners of Divisions in 1868, and this temple was thus noticed :—

"It is falling into great disrepair, and the Máhunt Goshains are not inclined to repair it. They care little for the state of the building as long as their fees come in regularly. Suggests that the Raja of Jaipur, who is a descendant, be requested to grant funds for its repair, or repair it himself."

His Honour the Lieutenant-Governor of the North-Western Provinces remarks marginally that "Government ought to keep this in repair."

I was informed at Bindrabun that a drawing of the original form of the temple might be found on the walls of the Fort at Jaipur [I have had a tracing made of the frescoe which is in the Amber Palace, Jaipur —H. H. C.] : thus, a roof like the original can be restored. The interior of the temple requires a great deal of petty repair, and I think that the Mahunt Goshains should be urged to preserve it.

The temple at Goverdhun, called Mandir Hardeoji, also requires much repair; the roof is very unsafe, and the superstructure of the sanctuary was destroyed by Aurungzib. A note in the Amalgamated List of Buildings in the North-Western Provinces states—"About twenty years ago Rajah Bulwunt Singh of Bhurtpur had it repaired, and the present Rajah, Juswunt Singh, intends doing so now."

The Palaces at Díg are in very excellent repair, and are frequently inhabited by the Raja of Bhurtpur and English visitors.

At Fatehpur-Sikri it appears that a portion of the Durgah Fund is at the disposal of the Collector of Agra, and that urgent repairs are executed in buildings that are occupied.

Akbar's office is in use as a dâk bungalow, and the Bírbul Palace and the house of Miriam, one of Akbar's wives, are occasionally occupied by Europeans. [I hope that a proper dâk bungalow will be built and so release these buildings, the repairs of which are now sanctioned —H. H. C.]

Shaikh Salim Chisti's tomb is in good preservation, and the only buildings that appeared (during my stay at Fatehpur Sikri) to require conservation were the apartments used by the Sultana and the Khas Mehal.

The eaves of the roofs in both should be renewed to protect the stone-work from the rain, as well as to take away the air of neglect that hangs over these buildings.

Conservation of Kashmir temples

The ancient temples in Kashmir are mostly in a ruinous condition. The Maharaja should, however, do something to preserve these interesting ruins. The enclosure and temple of Marttand should be kept free from jungle, and it would be no great expense to cover the now open roof of the temple with a thatch so as to preserve what is left of the interior carvings.

The tank round the temple at Pandrethan should be cleared of reeds, and the stone roof repaired in order to preserve the beautiful carved stone ceiling in the interior.

The enclosure and the temple at Bhaniyar appear to receive some care, and, being the most perfect of their kind in Kashmir, should not be allowed to fall into a worse condition than the present. At Avantipur it would be useless to attempt any repair or restoration. At the other temples at Payach, Pathan Wangat and Srinagar, the jungle should be prevented from choking up the ruins and cleared, so as to allow of close inspection.

G

Note on the Industrial Arts in India, dated May 1879.

1. Although influences have been long active tending to deteriorate the original character of Indian ornament, no great attention has been drawn to the subject until within the last few years.

2. Changes have been wrought so gradually that they have received little notice from those whose daily occupations have been to minister to the more urgent and practical wants of this country. It is only by comparing the manufactures of 30 or 40 years ago with those of to-day that a full estimate can be formed of the harm that has been done.

3. Owen Jones, Sir Digby Wyatt, Redgrave, Lübke, Langles, Dr. Royle, Taylor, Forbes Watson, and Birdwood have at various times drawn attention to the peculiar merits of indigenous Indian ornament as applied to works of utility; but the *first* concentrated effort to bring together the facts of the subject as at present known was made when, in 1874, the task of compiling a descriptive catalogue of the Indian objects exhibited in the South Kensington Museum fell upon myself.

4. The opportunity I then had of examining both the collections there and at the Indian Museum served to strengthen and stimulate the interest I have always taken in the general subject of Indian architecture and art.

5. As Archæological Surveyor in the North-Western Provinces from 1868 to 1870, my observations were mostly directed to old temples and buildings in Kashmir, at Agra, Delhi, and at Sanchi in Central India; but architecture is the parent of industrial ornament, and the latter is often to be valued not alone for its intrinsic beauty, but for the interest it possesses in a recognisable architectural origin.

6. The collections of Indian art at the Indian Museum and at South Kensington are the results of various Exhibitions held in London and abroad. Many of the best specimens of modern art industries that have been collected in this country for the international gatherings of 1851, 1855, 1862, 1867, 1870-74 and 1878, have eventually been secured for one or other of those institutions.

7. From those it is curious to trace that gradual introduction of European forms of ornament which have not ceased to impart a debasing and impure character to the ornament and colouring employed in the industrial arts. This degradation has of late, and specially since the last Exhibition at Paris, excited much comment; but if the corruption of Indian art by the uncontrolled mixture of styles meets with no approval in Europe, how much more should dissatisfaction and disapproval be felt among those who are in the country, and in whose hands lies the power of rendering help?

If the debasement appears in the collections at home, it certainly is much more apparent in the objects daily produced and sold to us in this country.

8. I know of no example so deplorable as the present condition of Aligarh pottery. In former days this industry was noted for graceful well-modelled shapes. To-day it is detestable for its worthless imitation of English jugs covered with vine leaves. I quote this case of Aligarh pottery, as collections are displayed for sale at the railway station at Aligarh, and always excite in me feelings of regret at what I consider to be an industry completely ruined.

9. There are, however, many examples of handicraft more or less debased by our Western tastes and styles—some so much as to damage the demand for them.

It is often difficult to tell pieces of Delhi from vulgar Birmingham jewellery. The kuft metal work of Gujrat and Sialkot loses its flavour in the application

to inkstands, picture frames and small objects, instead of to shields and arms. Carpets are now often woven on designs furnished by tasteless English dealers; embroideries are applied to English instead of Indian fabrics; and the patterns in Kashmir shawls are no longer the so splendid specimens of pure Indian colouring and outline that has made them famous in years gone by.

10. The importance of helping Indian industries to recover their old characteristics should, I think, be considered in connection not only with the value from an educational point of view, but with the view to a direct benefit which may arise to the craftsmen themselves, and ultimately to Government.

11. The love of decorative art is very much on the increase in Europe, and is diffusing itself all over England. People formerly content to accept anything from India as a mere "curiosity," are now more discriminating as to purity of style. They know something of Hindu forms and mythology, and of the exigencies of the Mussalman creed forbidding the imitation of human or animal shapes. A demand may not instantly result from such growing knowledge, but in tracing the possible future of Indian arts the tastes and knowledge of patrons and buyers are worthy of consideration.

12. Museums and Art schools have been established in this country, but not with any very precise aims as regards Native art. [The schools want ample means and special opportunities for studying Indian arts.—H. H. C., 18-7-82.] To render them of use they should be accessible and attractive to Natives, and well stored with objects of the best indigenous art.

13. Instruction in European styles confuses the Native student, and unfits him for the development and advancement of his own craft. With the best wish to adopt our forms, he fails, for want of sympathy and understanding. He reverts, however, with readiness to his own traditional ornament.

14. To bring this back to him requires ample illustrative material, in the collection of which lies the mainspring of the power of Government to render assistance. Give a clever workman a good Native pattern, and he works willingly and with success; but he is incapable of correctly interpreting European forms.

15. The varieties of ornamental manufactures in India are numerous: some alive, some dying, some dead, and some perverted. To revive and preserve can, I think, be best accomplished by taking stock of the best ancient and modern work and making it easy of reference to Natives.

16. I believe that a series of illustrations collected from the best types would not be very difficult or costly to produce. The sources from which they could be obtained are—

(a) architectural flat and carved ornament;
(b) ancient works of industrial art; and
(c) from existing illustrations of varieties of Indian art in English and foreign books on the subject.

17. The drawing published in single plates could be purchased by Natives, or in some cases distributed free of cost; schools of art and museums should have on view and for sale a complete set.

18. I believe that a simple process of giving illustrations will accomplish much good, and after it proves itself to be successful the scope of museums and schools of art may be extended.

19. As an example of where good patterns seem to be wanted, I may mention the case of pottery made at Multan. Two Natives know the secret of making the two shades of blue, by means of which they produce beautiful effects in the limited sphere of their traditional foliation. They apply this with great success to plates, tiles for mosques, vases, &c., but they have not access to the thousand varieties of ornamental outline existing in the enrichments of old Hindu and

Muhammadan buildings. They also want more knowledge of the old pottery shapes which India can supply from its three corners. Encouragement would extend this industry, which does not confine itself to Multan, but is still alive in Sind.

20. There exist throughout India many thousand craftsmen able to produce admirable saleable works in textiles, pottery, metal, wood and stone; and I cannot but think that it would be more profitable to encourage these people in industrial pursuits rather than they should be left to labour in the fields.

21. To keep up the interest among workpeople who still produce good manufactures, the establishment throughout India of an industrial order of merit, say a medal or certificate, would be of great good. It would be necessary to show care in the award of such recognitions; but there are many civil and military officers possessed of good taste from whom local judging committees could be formed. The labour to them would alone be a relief in the dull monotony of official work, and would excite an interest, not only in India, but amongst their friends in England.

22. To collect the necessary materials for producing illustrations of the best known ancient and modern art industries will require the co-operation of Local Governments and Administrations; but with such assistance, and with a small grant from imperial funds, a staff of clever Native craftsmen may be organised to carry out the work.*

H

Report from Captain H. H. Cole, R.E., on Special Duty, to the Secretary to the Government of India, Public Works Department, dated Simla, 10th May 1880.

I have the honour to acknowledge your letter No. 126B., dated the 20th ultimo, requesting me to submit a report on the subject of a definite scheme for carrying out the conservation of monuments of artistic and historical interest.

2. In the memorandum which I beg leave to annex to this report I have pointed out that, for special repairs, preservation and illustrations, it will probably be necessary to create Divisions similar to that in the North-Western Provinces for—

Appendix II.

(1) Bengal.
(2) The Punjab.
(3) The Central Provinces, Rajputana, and Central India.
(4) Bombay and Hyderabad.
(5) Madras and Mysore.

It may be found on investigation that some Divisions should not be limited to a Presidency or Province. For instance, it may be held convenient that Gwalior should be placed under the Archæological Division in the North-Western Provinces.

I have recently inspected the architectural and historical monuments to be found in and around Lahore and Delhi, and hold the strong opinion that, if the

* I have drawn up a list of some Indian industries of which I know something.

buildings at those much-visited and populous places be rescued from the adverse circumstances and neglect which prevail to such a large extent, very valuable and creditable work will be the result.

Besides Lahore and Delhi, there are many other places in the Punjab having interesting and valuable monuments, most of which are mentioned in the official list published in 1875; but I would suggest that Major-General Cunningham, R.E., should be asked to furnish the names of any objects of archæological interest in the Province which he considers call for special care or preservation.

Architectural Division for the Punjab.

There is enough work at Lahore and Delhi alone to justify the establishment of a separate Architectural Division for the Punjab. Valuable outlying monuments can be taken up gradually as funds are provided; but I feel that it is necessary to begin at the important centres, being convinced from what I have lately seen that architectural monuments have suffered, and are suffering, more from the acts for which Government is responsible than from the natural decay and ruin produced by rain or vegetation in the jungle and deserted places.

Architectural Divisions for other parts of India.

I hope during the present year to be able to investigate some of the most remarkable buildings in Bengal, the Central Provinces, Rajputana, and Central India, as well as in the Bombay and Madras Presidencies, with the view of submitting definite proposals.

The Agent to the Governor General in Central India has recently recommended that the vegetation round the famous Buddhist Tope at Sanchi be cleared and the fallen gateways re-erected, and Mr. Bernard has invited my opinion. I not only think Major Prideaux' * proposal to clear away the jungle an exceedingly good one, but hold that the setting up of the fallen gates is one of the first and most important works in a scheme of conservation of valuable antiquities and works of art in India. When engaged in making a cast of the eastern gateway in 1870, I had careful drawings made of the fragments of the fallen south and western gateways; also of the small gateway near the large tope; and these have been published in Mr. Fergusson's book on Tree and Serpent Worship. (See page 111, plates VII and VIII; page 116, plate XV; and page 119, plates XVIII, XIX, and XXI.)

From these restored drawings (most of the pieces of stone carvings are on the ground) it will be seen that some of the stone-work is missing, and would have to be supplied in plain blocks in order that the structures may be built up securely.

I am at present able to speak particularly only of Lahore and Delhi, and of what Mr. Heath (the Executive Engineer of the Archæological Division in the North-Western Provinces) has done at Agra and the neighbourhood.

Appendix I.

Of the latter work I submit a separate report. The results are satisfactory in the highest degree, and must be most gratifying to their author, Sir John Strachey. *The work instituted by him in the North-Western Provinces shows convincingly how barbarous it is to withhold similar measures for preservation from other parts of India.*

3. Without entering into a lengthy description of buildings which are well known and have often been described by Major-General Cunningham, R.E., Mr. Fergusson and others, I merely here note the condition in which I found some of them during my late visit, and state what I think necessary to prevent further decay or maltreatment, and what in certain cases should be done towards complete renovation or restoration.

* Political Agent at Bhopal.

4. **Buildings at Lahore.**—The first building that I visited at Lahore is an old gateway, called the "*Chauburji*," which is 1½ miles off on the Multan road. It was the principal entrance to a garden, which no longer exists, and which was built by Zeban Nishan, daughter of Alamgir, in 1641 A.D.

Chauburji.

This gateway is square in plan, and had four minarets, three of which remain. The material is brick, laid in lime mortar and faced with beautiful coloured tiles, cut in ornamental shapes and fitted, one to the other, like mosaic work.

The colours are unusually numerous—yellow, green, brick-red, dark-blue, light-blue, gold colour, orange—arranged in foliated patterns in spandrels, panels, soffits, and borders.

One corner of the gateway has completely fallen. Plans and elevations will be made, to show exactly what the present condition is. The tile-work is so beautiful, that I think the progress of decay and ruin should be stopped by securing the existing veneer and by propping up and strengthening the weak portions of the masonry. The fallen débris should be cleared away, and the place cleaned up and surrounded by a stone railing. The cost of these measures will be estimated when the plans are completed.

The Shahlimar Gardens.—The Shahlimar Gardens, about 4 miles from Lahore on the Amritsar road, were laid out in 1637 A.D by order of the Emperor Shahjahan. They are extensive and surrounded by a fine wall and masonry gateways. The gardens, although sometimes called the "Versailles of the Punjab," are indifferently kept up, and the canals of water and fountains require cleaning out and repairing. The baradaris and kiosques in the centre were looted by Ranjit Singh of their marbles, and have been badly restored; and the brick-work laid on edge in fanciful patterns on the terraces and walks should be put in good order. At one corner of the enclosure is a *hammam*—at present dirty and neglected; but there are some finely painted wooden doorways between the various bath-rooms, which should be taken care of and protected by a hard colourless varnish, such as is used to preserve old oil-paintings.

Shahlimar Gardens.

Painted wooden decorations of Shah Jahan's time are not very common, as so much has been destroyed in his buildings. It is therefore all the more satisfactory to come across specimens which are not past preservation. The central baradari has coloured walls of arabesques painted in fresco, and some richly painted wooden ceilings. To prevent damage, measures should be taken by some one specially engaged for his acquaintance with processes for reviving and preserving old painted work. Plans are in course of preparation of this garden and its buildings which will permit of an estimate being framed for keeping up the place and what remains of its decorative works.

Golabi Bagh.—On the road to the Shahlimar Gardens and about half-way is a gateway which formed the entrance to the *Golabi Bagh*. The garden has disappeared, but this building, at present occupied by the police, is a fine specimen of coloured tile-work (or "*kashi*," as it is called), and is worth preserving from the ruin which is rapidly overtaking it. Drawings are in course of preparation showing its existing state, and from which the estimate for preserving the building can be framed. It will, in my opinion, be merely necessary to secure the present veneer of tile-work, and to strengthen the existing masonry and make the roof proof against rain. The building should be cleared and fenced round with a good stone railing.

Golabi Bagh.

Begumpura.—Beyond the *Golabi Bagh* and off the road to the left in the Shahlimar direction is a small building at a place called Begumpura, where the tile-work is very

Building at Begumpura.

fine, and worthy of the same kind of protection recommended for the *Golabi Bagh* gate. Drawings will be made.

Shahdara.—Shahdara is on the north bank of the Ravi, and about 2 miles from Lahore by the State Railway. Here are—

Tomb of Jahangir at Shahdara.

(1) the tomb of Jahangir, with enclosure and garden;

(2) a sarai;

(3) the tomb and enclosure of Asuf Khan and that of Nur Jahan.

The whole place, excepting the actual tomb of Jahangir, is utterly neglected and uncared for. Bahadur Shah, Ahmad Shah and Ranjit Singh carried off many of the marbles, and the occupation by the British troops after the Sikh war caused great damage. There exists, however, an evil which has caused, and is still causing, unceasing and cruel destruction. Between the tombs of Jahangir and Asuf Khan is the sarai, which has been converted into an engine-yard and manufacturing depôt of the State Railway. Holes have been knocked in the walls, the grounds broken up, and the various gateways occupied by the railway employés and their families! As, I have said, the mausoleum of Jahangir is the only building at all cared for. It is in the centre of a large square-walled enclosure, and was built by Nur Jahan in 1628 A.D. It now consists of a raised terrace with lofty minarets at the four corners. Below the terrace is an open colonnade, which surrounds the tomb of the Emperor. The inlaid marble-work and painted decorations are very beautiful and well worth protection and renovation.

Before Ranjit Singh's time there existed a marble pavilion on the terrace, but the materials were removed by him to build the baradari in the Huzuri Bagh in Lahore. My own impression from the style of this baradari is that it was removed bodily from Shahdara. If this is ascertained on careful investigation to be the case (and tolerably trustworthy evidence could be obtained by measurements and inquiry), I think the building ought to be restored to its former position. Along the walls of the open colonnade round the tomb is a Dado of beautiful tile-work, now invisible on account of coats of whitewash: this whitewash should be carefully removed.

Plans of the Shahdara enclosures and tomb are in course of preparation. The garden round Jahangir's tomb is a mere waste, and part of it is let out for ordinary cultivation. Some of the gateways have fallen to ruin, and should be, as far as possible, repaired.

As an essential part of the whole conception, I am strongly of opinion that the grounds should be put in thorough good order without any expensive horticulture, and that the encroachments made by the Ravi at the south corner should be restrained by strong walls and breakwaters.

It is difficult to roughly guess at the probable cost of putting the grounds and buildings in repair; but I hear that orders have issued for the railway to move their shops and to leave the place, so that the cost of this would not be debitable to the work of conservation.

Badshahi Masjid.—The *Jama Masjid*, or Badshahi Masjid, near the fort, was built by Aurangzib in 1674 A. D., and is in a fair state, having, through the exertion of Major Parry Nisbet, when Deputy Commissioner of Lahore, been repainted inside and generally repaired. The funds were subscribed by the Muhammadans of the city. Repairs to the colonnade of the building require to be completed. In front of this

Jama Masjid.

masjid is the Huzuri Bagh, in the centre of which stands a marble pavilion with some beautifully painted ceilings, composed, if not wholly, of part of the materials of the cupola which formerly surmounted Jahangir's tomb at Shahdara. As I have already stated, I think the cupola should, if possible, be restored to its original position.

Roshnai Gateway.

The Roshnai Gate.—The *Roshnai Gateway*, near the Huzuri Bagh, has been badly restored, and is an example of the damage done when work of this kind is left to unqualified and unsympathetic hands.

Ranjit Sing's Tomb

Ranjit Sing's Tomb—Is in fair preservation, but it has some fine doorways of carved wood, which require cleaning and preserving. Sir Donald Macleod had the interior columns strengthened with iron clamps.

These buildings (*i e*, the *Jama Masjid*, the *Roshnai Gateway*, and *Ranjit Sing's Tomb*) call for no special treatment, but should be in charge of the Executive Engineer of the Punjab Architectural Division.

Wazir Khan's Mosque

Wazir Khan's Mosque.—The *Mosque of Wazir Khan*, built in 1635 A D., in the centre of the city, is a magnificent specimen of tile decoration. It is itself a perfect grammar of coloured ornament, and is one of the most valuable architectural monuments in Lahore. It furnishes nearly as much subject and matter for the student of decorative art as the Alhambra itself, and a volume rivalling Owen Jones' work could be produced As I have elsewhere stated, the illustration of architectural matter, such as this building possesses profusely, will do more to revive and encourage the ceramic art of India than anything I know of The mosque and its enclosing walls and buildings are built of brick, veneered over with tiles cut and laid like mosaic work Being in the heart of the dusty city, it is sadly in want of cleaning and repair Plans and drawings are being made, but any necessary funds laid out in prolonging the existence of this beautiful building would be well worth spending

I also strongly recommend the sanction of Rs 5,000 for the production of a set of detailed illustrations of coloured tile-work in Indian buildings based on this mosque and for repeating 250 sets by chromo-lithography

Palace buildings in the Lahore Fort

Lahore Fort.—There is a great deal of interesting architecture to be seen in the fort, if one could only get at it. On entering the outer gate, the wall of the fort and palace is to be seen covered with designs in inlaid enamelled tiles peculiar for the representation of human figures, animals, and signs of the zodiac The whole of this should be preserved and made as secure as possible against rain. On the 10th of April, when I first went to examine the buildings, I found myself stopped at the entrance to the *Shish Mahal* and *Saman Burj* by a sentry, because some prisoners from Kabul were confined in those buildings. The fine old pillared *Diwan-i-Am* and throne-room is in use as a common barrack room filled with men's beds and kit, and the rooms at the back of the throne used for dining in. The walls and ceilings of the latter were once finely painted, and these, together with the marble throne and cupola, are not likely under present circumstances to meet with very tender treatment. The building is also much spoilt by being enclosed all round, instead of being, as originally and like all buildings of its class, an open pavilion.

Khwabgah.—The *Khwabgah* of Shah Jahan, of marble and lattice-work, is in use as a garrison chapel—from its traditions about as unsuitable a place for Christian worship as could be selected. The building is enclosed on all sides by ugly wadded purdahs, and a new and utterly unsuitable modern timber roof has

been added. The font is at a place which Shah Jahan would most likely have selected for his couch to catch the air through the marble lattice.

Moti Masjid.—The *Moti Masjid of the Palace,* a small and beautiful building of white marble, is now blocked up, and otherwise adapted to the purpose of a treasury. It was therefore quite impossible to examine the building closely. The *hammam* between this and the *Diwan-i-Am* is used as a hospital.

The remains of some of *Jahangir's buildings* are used as the Sergeant-Major's quarters. And some domed buildings belonging to the palace with painted ceilings (one of which a year ago barely escaped the departmental whitewash brush) are in use as officers' quarters. The only buildings not in present use are the *Armoury,* which is a sort of museum of old weapons, the *Shish Mahal* and the *Naulaka,* a mosaic marble pavilion of Aurangzib, much out of repair. The latter should be restored and thoroughly renovated.

The Shish Mahal.—The painted ceilings and walls of this building were renovated at the time of the Prince's visit, but it is not difficult to see the difference between the new and old work.

Careful plans and drawings of all the buildings in the fort are being made, and will be submitted, for prolonging their existence as works of art and for terminating their incongruous relations with the military authorities. I would recommend that all the buildings of interest be, as far as possible, restored and fenced in, so as to keep them separate from the barrack buildings, and that they be kept up solely as show places and as the only means of perpetuating some of the most beautiful and interesting specimens of Lahore Imperial Mogul art. When it is considered what an outcry would be made at a proposal to convert *St. James' Palace* into an underground railway station, or *Hampton Court* into a barrack, I think that there exist fair grounds at Lahore for putting an end to the present discreditable state of things at the *Fort* and *Shahdara*, and for some such measures as I here put forward in regard to other valuable buildings.

Buildings at Delhi.
The Fort and Palace building.

The Fort and Palace buildings at Delhi.—As in the case of the Fort buildings at Lahore, those at Delhi are almost all in military occupation.

The Diwan-i-Am.—The great pillared *Diwan-i-Am,* with its fine marble mosaic canopy and throne, is used as a canteen, and on the right of the throne is a bar for serving out liquor! To the left of the throne is an enclosure of bamboo screen-work in which Nubbi Bux keeps a soldiers' coffee-shop! Above and at the back of the throne is a small open apartment, the walls of which are faced with the celebrated black marble mosaic work; but this work, as well as the inlaid patterns on the throne, have been villainously repaired in coloured plaster, and the arrangement of the panels is not as formerly. Some of these panels were removed by Sir John Jones at the time of the Mutiny, and are at the India Office Museum in London. They might be brought to this country and placed in their original position. The door at the back of this room has been ingeniously filled up with iron bars, through which the interesting process of sodawater manufacture can be watched and heard. The whole building should be cleared, kept clean and repaired.

The Diwan-i-Khas.—This beautiful pavilion is not in military occupation, but it has been disgracefully treated. To prepare for a ball given in honour of the Prince of Wales, the moulded fretwork of the wooden ceiling in the centre of the building was repainted in black, red and gold instead of white and gold, the original colours, and the central rose was converted into a sort of starved star-fish! The effect, it is needless to say, is harsh and glaring. Fortunately the outer colonnade has the design of its ceiling intact, and from it the original colours and pattern can be restored in the ceiling of the centre hall. There is a great deal of

beautiful painted work to restore at Delhi, and it will be necessary to engage a properly qualified restorer of paintings to do the work. The roof of the Diwan-i-Khas is in an unsafe condition, and the proposal to renew it with iron beams seems to me to be right, provided the old ceiling below is left undisturbed; and this can only be done by leaving the present wooden beams to which the old ceiling is secured, and by inserting the iron joists from the top of the roof.

The painted work in the ceiling of the outer colonnade should be simply repaired and left as nearly as possible as it is now in tone and pattern, but rendered durable by means of transparent varnishes or other remedies familiar to the expert in painting restoration.

In order to examine the beams of the roof, the ceiling was pulled down in several places (instead of opening up the roof from above); and in replacing the moulded fret pattern, small half-moulded sticks were screwed up, and the screw-heads may be still seen!

The decorations of this building are perhaps the finest of any done under Shah Jahan, and, if I may express the opinion, no expense or care should be spared to prolong their existence. The marble floor of the building seems in fair order; the Dado of mosaic wants repair, many stones having been picked out and the holes in some places filled with coloured plaster. The beautiful, gilded arabesques on the upper part of the marble pillars should be carefully restored where the weather has washed off the pattern, and the roof must be made perfectly water-tight.

Khwabgah, Baitak, and Saman Burj.—The marble buildings on the right of the *Diwan-i-Khas* comprise the *Khwabgah, Baitak*, and *Saman Burj*, and are filled with beautiful marble traceries and painted ceilings and walls; but in the outer verandah some of the decoration has become weather-beaten. The marble mosaic Dado round the rooms is a good deal damaged and requires repairs. The painted ceiling in the small kiosque which projects towards the river is damaged, and the railing which formerly went round the front is wanting.

The two small rooms towards the *Diwan-i-Khas* have been plastered and white-washed, thus hiding a painted and gilt wall. The red sandstone columns between them were chunamed over in 1876.

The Hammam.—The *Hammam* buildings on the left of the *Diwan-i-Khas* have had all their painted ceilings whitewashed over. The floors and baths are inlaid with stones, and require much repair and renovation.

As in the case of the buildings on the right of the *Diwan-i-Khas*, the sandstone columns which face that building are plastered over.

The Moti Masjid.—The *Moti Masjid*, close to the *Diwan-i-Khas*, is in fair condition, but petty repairs are necessary to put the marble floor and inlaid work in order.

The Haiyat Baksh.—When laid out by Shah Jahan the fort buildings were all connected by covered colonnades, and there were several gardens, one of which, the *Haiyat Baksh*, has disappeared; but the bath in the centre and two marble pavilions still remain. These latter have had their marble mosaic Dados white-washed; one building is used for serving out meat rations, and the other as a gymnasium!

The Rang Mahal.—The *Rang Mahal*, or painted palace, is now whitewashed, re-roofed, and partitioned off to suit the requirements of a mess-house!

Many other buildings in the fort are put to improper uses; and I think there can be no two opinions on the necessity for keeping all the interesting and

decorative parts of Shah Jahan's palace as much as possible as they were, and only for the gratification and edification of European and Native visitors.

It would be easy to fence them all in one enclosure; and after they are repaired and renovated, and the troops are accommodated in other and more suitable buildings, the whole should be handed over to the custody of the local civil authorities to keep clean and properly cared for.

Plans are being made and estimates are in course of preparation for doing all that is necessary, without including the cost of erecting suitable buildings for military purposes elsewhere in the fort.

Jama Masjid

The Jama Masjid.—The *Jama Masjid* is kept repaired by Muhammadans and by occasional gifts. It is in very good order, but wants to be kept cleaner.

The "Mimbah," or pulpit, of white marble, wants repairing.

Zinath ul Masjid

Zinath-ul-Masjid.—The *Zinath-ul-Masjid* is a fine mosque, built in 1710 A.D. by Zinath-ul-Nisan, daughter of Aurangzib. It was used a few years ago as a Commissariat bakery; but this has been removed. Whitewash was liberally applied when artillerymen were quartered in the building during the mutiny, and the whole place is now thoroughly neglected, the roof leaks, and the red sandstone beams below are decaying in consequence. The building is in Delhi, in what is called Daryagunge, and should be put in good order. Plans are preparing for an estimate.

Buildings at the Kutub
(See photographs in Book on Architecture of Ancient Delhi, published by the Arundel Society in 1872.)

Buildings at the Kutub.—The *Kutub Minar* is in good order generally, but some of the carved stone-work in the lower band is falling away through crushing. This should be made secure, and the carved work, which has become discoloured by weather, should, if possible, be cleaned.

The whole of the ruins about the Minar, such as the *Masjid-i-Kutub-ul-Islam, Kutub-ud-din's arches, Shams-uddin's arches and Ala-ud-din's gate, Shams-ud-din's tomb*, &c., should be cleared of fallen stone, the carved portions collected and, if possible, replaced from where they fell, other débris of no interest should be removed. Columns and walls should be rendered secure, and roofs made water-tight. The whole area should be enclosed with a substantial stone railing to keep away cattle, which now defile the place; and the grounds should be kept up, and good paths made to all the interesting monuments in the vicinity. A plan is in course of being made which will show what I propose, and from which an estimate can be framed.

Imam Zamin.

Imam Zamin.—The tomb of *Imam Zamin*, which is surrounded with red sandstone screenwork, is much covered with whitewash, which is a great disfigurement.

Jamali Kamali.

Jamali Kamali.—The tomb of *Maulvi Jamali Kamali*, 1535 A.D., near the Metcalfe House at the *Kutub*, is the remains of a most beautiful building; it stands in an enclosure now overgrown with jungle. The floor of the building is of white marble, and round the walls is a Dado of partly whitewashed tiles. The upper walls are beautifully inlaid with colored tile-work, and the ceiling is ornamented with incised and coloured plaster arabesques. The exterior is in great disrepair, and many of the coloured tiles which once adorned it have been removed. The whole place should be cleaned up, and the tomb put in a good state of repair. It is not possible to restore and renovate the tile-work, but a good deal can be done to preserve the building.

Masjid of Fazalullah.

Masjid of Fazalullah.—The *Masjid of Fazalullah*, 1528 A.D., near *Jamal Kamali*, is a massive stone building of considerable beauty. The enclosure is overgrown with jungle, and the mosque itself is filthy and used by cattle. The place should be cleared and put in a state of complete cleanliness and repair. A plan and estimate are being made.

Adam Khan's Tomb.

Adam Khan's Tomb.—*Adam Khan's Tomb*, near Mahrauli, date 1562 A.D., calls for no special treatment, but the roof is threatened with vegetation and should be repaired and made secure; the ground about the tomb should also be cleared of débris.

Humayun's Tomb.

Humayun's Tomb.—*Humayun's Tomb*, 1565 A.D. The tomb itself is in a fair state of repair, but the terrace on which it stands has lost more than half its stone railing, and the arches supporting the terrace stand in need of repair; much of the marble inlay is defaced.

The enclosure in which the tomb stands was formerly a beautiful garden, with terraced walks and entrance buildings at the centre of each wall. Now the ground has lost all the character of a garden, and is let out in patches to cultivators [these were, until quite recently, the descendants of the King of Delhi!!—H. H. C., 29-8-82] who grow cabbages and tobacco. The gateways are all in a state of great disrepair, and should at all events be cleaned and made secure against weather. A small tomb in the garden, with considerable pretensions to beauty, is in use as a cattle shed, and is much in need of repair.

I think the system of letting out the gardens of tombs to cultivators a very unworthy means of adding to municipal funds. A plan and drawings are making of *Humayun's Tomb* and enclosure, for putting the buildings and garden in good order.

Near *Humayun's Tomb* is a collection of buildings, all of which, on account of their interest and beauty, should be in the charge of the Executive Engineer of the Punjab Architectural Division.

Chausath Khamba.

Chausath Khamba.—The *Chausath Khamba*, date 1600 A.D., is a marble pavilion of 64 pillars, with beautiful marble screen-work enclosing it. The building is in fair order, but some of the perforated screens which had in parts disappeared have been renewed in stone.

Nizam-ud-din's Tomb.

Nizam-ud-din's Tomb.—*Nizam-ud-din's Tomb*, date 1324 A.D., has been repaired and added to in Akbar's and Shah Jahan's time. There is a good deal of marble screen-work and painted decoration. Over the tomb is a wooden canopy inlaid with mother-o'-pearl. The tomb is looked after by Natives, but they damage it with whitewash, which should be removed so as to show the original work.

Khusru's Tomb.

Khusru's Tomb.—The Poet *Khusru's Tomb*, date 1350 A.D., is a marble building, also liberally treated by the Natives, who look after it with whitewash. It is also very dirty and requires repair.

Jama'ath Khana Masjid.

Jama'ath Khana Masjid.—The *Jama'ath Khana Masjid*, date 1353 A.D., built by Feroz Shah, is a fine building, of red sandstone, with incised ornament on the façade, like the arches of Kutub-ud-din at the *Kutub*. Whitewash has been used freely by the Natives and should be removed. The building requires much repair. The interior domes have painted ceilings of great beauty and plaster incised work.

Kalan Masjid.

Kalan Masjid.—The *Kalan Masjid*, built by Feroz Shah, 1351-1385 A.D., is in Delhi. The inscription over the entrance doorway was formerly inlaid and requires renewal. The interior of the building wants cleaning up and petty repair, and the plaster of the domes wants repairing badly.

Repairs to the above buildings should, I think, be defrayed out of a special grant for petty repairs.

Fatehpuri Masjid.

Fatehpuri Masjid.—The *Fatehpuri Masjid*, date 1640 A.D. The stone-work of the interior has been coated with whitewash and the carved Dado with red paint. The stone slabs of the roof threatened some years ago to give way, and two rows of pillars with arches were built up in the centre, forming an intermediate series of pillars; but these are not of the same pattern as the old ones and should be removed, the roof being strengthened with iron joists. A plan will be prepared for this.

Safdar Jung's Tomb.

Safdar Jung's Tomb.—*Safdar Jung's Tomb*, date 1753, stands in a large enclosure, with gateways on all four sides. The tomb itself is in fair order, but requires some slight repairs. The garden is in a bad condition, and, like that of *Humayun's Tomb*, is let out to cultivators. It should be put in good order; the entrance buildings want much repair. The principal entrance has a finely painted ceiling in a small apartment facing the tomb. Plans will be prepared for necessary repairs.

Kila Kona Masjid.

Kila Kona Masjid.—The *Kila Kona Masjid*, date 1540 A.D., is a beautiful building in *Purana Kila*, and requires considerable repair. Plans will be prepared.

(See Photographs Nos. 17, 18, 19, 20.)

The old buildings at *Tughlugkabad* at *Purana Kila*, *Ferozabad*, *Sultan Gori*, &c., should be cleared of débris, but further investigation than I have yet been able to make will be necessary.

I recommend strongly that a sum of Rs. 5,000 be sanctioned for the preparation of detail drawings of carved wood and stone ornament and of painted decorations, in which the *Delhi buildings* abound. The plates should be published for general sale and circulation, in order to stimulate Indian industrial art and for use in schools of art throughout the country.

Special Architectural Division for the Punjab.

In order to inaugurate the conservation of works of art and antiquity in the Punjab, I recommend the establishment of a new division called the Architectural Division. An Executive Engineer, with special qualifications, to be appointed to the charge of this Division, and, as in the case of the North-Western Provinces, to be under the Chief Engineer, and his work carried on under the immediate orders of the Lieutenant-Governor issued through the Chief Engineer.

His first duty would, I think, be to put in hand the works and projects sanctioned by the Government of India, and to prepare any fresh projects for the protection of monuments which the local authorities recommend for preservation or renovation. The only difference that I would suggest between the new division and that already at work in the North-Western Provinces is that after initial measures for preservation or restoration are complete, the buildings should be handed over to the civil authorities for custody and keeping in good order.

The head-quarters of the Executive Engineer in charge of the Division should, I think, be at Lahore, with a sub-division at Delhi.

He should, I think, obtain the co-operation of the Mayo School of Art, and give employment to the pupils trained under Mr. Kipling, as far as possible, when delicate ornamental details have to be repaired. Attached to the Executive Engineer's Office there should be a photographer, who, if possible, should also combine the qualifications of head draftsman and restorer of paintings. A properly qualified man could be obtained for a limited engagement for Rs. 100 a month.

As regards the provision of funds, I beg leave to submit a suggestion that discretionary power might be given to District Officers who are interested in fine monuments and buildings to invite subscriptions from Hindus and Muhammadans. Large portions of the revenue are alienated for religious purposes, and it might be possible to make over some of the endowments for purposes of repairs and maintenance of temples and mosques.

II i

Report on the Restoration and Preservation of Architectural Buildings in and near Agra.

Every visitor to Agra is aware of the great beauty of the monuments and buildings in the neighbourhood. The magnificent architectural works in Agra itself, at Sikandra, at Fatehpur-Sikri, at Bindrabun and in Muttra, attract crowds of visitors from all parts of the world and from every corner of India. Moreover, Mr. James Fergusson's well-known "History of Indian Architecture" has made these monuments familiar to the world at large.

Within even my recollection, Agra was, however, a vast area of splendid buildings more or less ruined.

When Sir William Muir became Lieutenant-Governor of the North-Western Provinces in 1868, he was concerned for the safety of the palaces in the Agra Fort, and directed me to inspect and report on them. (See Appendix D, page V.)

I found many in a dangerous state, and none that had not been somewhat defaced. Subsequently to this, works of restoration were commenced.

Sir John Strachey's Minute of 25th August 1875 alludes to the ruinous condition of the Fort buildings in 1871 and 1873, also to the work of restoration that had continued, and notices what had been spent by him up to 31st March 1875, the total being a little more than one lakh on buildings in the Fort, on the Taj, and at Fatehpur-Sikri.

I now have the pleasure, and the honour, of reporting on the marked further progress made in the last five years, through the establishment by Sir John Strachey of the Archæological Division of the North-Western Provinces.

Buildings at Agra.—I visited Agra in April last, and found many works complete and many in hand. Mr. Heath, the Executive Engineer, is progressing very favourably, and the restoration and repair at the Taj, at the Fort, at Sikandra, at Itmad-u-Dowlah's tomb, and at Fatehpur-Sikri are highly satisfactory. I hope in a few months to visit the work which is going on at Jaunpur, at Bindrabun, and at Muttra; also to investigate the buildings in the Fort at Gwalior, which are unsurpassed for their beauty and historical interest, and urgently require attention. Mr. Heath is anxious to take up the latter work, and I think it would be a good and convenient arrangement that Gwalior should become part of his division.

Palace Buildings in the Agra Fort.*

Palace buildings in the Fort

The *Moti Masjid* in the Agra Fort has been completely renovated.

This building is in truth absolutely perfect in style and proportion, and entirely of white marble. In 1868 I found vegetation hard at work on the roof and marble domes; and the ceiling and cornices underneath were falling and decaying through damp.

In 1868 access was impossible to the *Chittor Gates* in the *Machi Bhawan*. They are valuable specimens of metal work, and can now be closely admired.

The small *Nagina Masjid*, which is at one corner of the *Machi Bhawan*, is a beautiful marble building and has been placed in excellent repair. There is, however, a small marble kiosque near it which wants cleaning and putting in order.

The *Diwan-i-Am*, and its beautiful throne and chamber at the back, of mosaic work, is in capital order.

In 1868 this fine building was used as an armoury, crowded with stands of muskets; and to adapt it to such a purpose, windows of a European pattern were built in, and the whole of the interior columns whitewashed. Now the building has been thoroughly opened out, and is in appearance precisely what Shah Jahan made it.

The colonnade of the *Machi Bhawan* is under repair and rapidly assuming its former and original state. In 1868 I found that the columns were nearly all fallen or threatening to come down, and the marble cupola on the east had been partially taken down as a measure of safety.

Leading from the *Machi Bhawan* towards the river is a large suite of *Baths* recently opened out and found to be ruined. The various domed rooms were once painted, but whitewash covers the walls; and the marble window-frames overlooking the Jumna have been looted of their lattice-work. Measures will in due course be taken to repair this part of the Palace.

The repairs to the *Diwan-i-Khas* have been sanctioned, but are incomplete as yet. The inlaid work is here very fine, and the building itself is in the best style of Shah Jahan's time.

The copper-gilt roof of the *Saman Burj* is being relaid, and the whole building renovated in a satisfactory way.

The interior of the *Shish Mahal* has been partially restored, but is very dark; and without a torch or candle the mirror work and paintings cannot be seen. The introduction of the utmost possible light into the chamber from the side walls and the completion of the repairs will greatly improve this building. The coloured marble Dado will require very careful treatment.

Much remains to be done to the *Khas Mahal*. The ceiling of the front portion of the pavilion has been taken down and iron girders substituted. The marble ceiling will eventually be restored. The ceiling at the back is in disrepair, and the painted work will be preserved, not re-painted

* "During the last three years the *Diwan-i-Khas*, the *Khas Mahal*, the *Saman Burj*, and other buildings have been restored to a condition of more or less complete security against further injury. Much work has been done, and is still going on, for the preservation of the *Jahangiri Mahal*. The Diwan-i-Am has been opened out, it has ceased to be an armoury, and the disfigurements which Mr. Fergusson described with just indignation have been swept away. The last vestiges of whitewash will soon have disappeared. There still remain near the Diwan-i-Am some unoccupied gunsheds and other hideous buildings, which will not, I hope, last much longer."—(*Extract from Sir John Strachey's Minute of 25th August 1875.*)

The famous wooden *Somnath Gates* are at present outside the pavilion called the *Rang Mahal*. I think they ought to be carefully set up in the *Diwan-i-Am*, where they would be well seen, and preserved as much as possible from dirt and dust. A detail drawing should be made of this gate.

Repairs which are sadly wanted are just commencing to the *Angori Bagh* colonnade.

In 1868, I found the *Jahangiri Mahal* little better than a ruin, which climate and neglect were making worse.

Rain found easy access through upper floors and destroyed the coloured ceilings; whitewash covered the walls; and stone-work lay in heaps in the centre of the court. Now the beauty of the building can be appreciated, the whole having been built up and parts actually renovated.

I think further experiments should be made to clean off the whitewash which hides the painted walls. I am not acquainted with the process, but I believe whitewash has been successfully removed from old frescoes in France and in Italy; but this I can ascertain. As far as the stone carved-work is concerned, the whole has not been *restored;* but I hold that quite enough has been done for the maintenance of the structure without repeating the carved details at great cost.

The *Akbari Burj*, to the right of the *Khas Mahal*, is being restored and nearly complete.

Jama Masjid.

Jama Masjid.—The fine *Jama Masjid* lost its principal gateway in the mutiny; and the *Tirpolia*, which was a walled enclosure between it and the fort, has been pulled down to find the site for the Rajputana State Railway station. What is left of the mosque is in fair order, but the interior walls above the marble Dado, which runs all round the building, are covered with whitewash. This building should, I think, come under Mr. Heath for petty repairs. It is well worth keeping intact and in good order.

Tomb of Itmad u-Dowlah.

The beautiful tomb of *Itmad-u-Dowlah* is in process of being completely renovated, and the work is nearly finished. The mosaic of the exterior walls had suffered terribly, but now has been renewed in a skilful manner. Something will be done to clean and preserve the splendid interior paintings. As I have pointed out, this kind of work will require an expert.

The grounds are not yet put in perfect order. The garden immediately round the tomb is somewhat looked after, but beyond this nothing has been done; and the enclosing wall and side buildings have yet to be repaired. Mr. Heath has made plans and drawings of this building, and the detailed drawings of the interior painted work will be most valuable.

Chini-ka-Roza.

Chini-ka-Roza.—The *Chini-ka-Roza*, beyond the tomb of *Itmad-u-Dowlah*, is said to be the resting place of Afzal Khan, Shah Jahan's diwan. The building and surrounding grounds are much ruined and occupied by cultivators. The tomb itself is covered with beautiful tile-work in numerous patterns and colours, and should be preserved.

Buildings at Fatehpur-Sikri. (See pages 59—116, "Buildings in the neighbourhood of Agra," published at the India Office, 1873.)

Fatehpur-Sikri.*—A glance at the photographs Nos. 20 to 25 in the book marginally referred to will show what was the ruined state of Fatehpur-Sikri in 1869. Now all the most important buildings are well in hand and approaching completion under Mr. Heath's direction.

* "At *Fatehpur-Sikri* the arches at the south-east corner of the Durgah, which had shown signs of failure, have been strengthened. I am sorry to say that the great archway, perhaps the grandest building of its class in existence, is said to require much care. Both at *Fatehpur-Sikri* and at *Akbar's Tomb at Sikandra* a great deal has to be done."—(*Extract from Sir John Strachey's Minute of 1875.*)

The colonnade of the *Fatehpur-Sikri mosque* has to receive some trifling repairs. Some of the marble inlay in the western gateway requires renewal, and chajjas are broken inside and outside the quadrangle. The beautiful *tomb of Salim Chisti* is in good order, but the interior paintings require attention to keep them well preserved. The interior of *Nawab Islam Khan's* tomb is whitewashed and wants cleaning: the gateway near this tomb and facing the *Buland Darwaza* wants repairs, and the renewal of inlaid marble and tile-work.

(See photographs Nos. 32, 33, 34, 35, "Buildings in the neighbourhood of Agra")

The painted decoration on the walls of the *mosque* ought, I submit, to be protected, but not renewed.

The *Buland Darwaza* is now in a very good condition, the principal archway having been strengthened and made good. This is a most creditable piece of restoration.

Outside the principal mosque is *Shaikh Salim's original mosque*, with bracket pillar, somewhat similar to those in his tomb. This curious building should be preserved.

In the masonry chambers underneath the mosque and all over the ruins a number of durri weavers are employed; and it occurs to me that some of the unoccupied buildings might be used for an Industrial Art School for stone-carving, if such an institution could be made self-supporting, or be established on a practical basis. The ground round *Abul Fazl's two houses* is overgrown with jungle, which remains to be cleared away.

The *Hathi Pol* is about to be repaired. The *Zenana Masjid*, between the *Jodh Baie's house* and the *Hathi Pol*, requires repair. The *Panch Mahal** wants repair, and the staircase leading to the top is unsafe. The *Diwan-i-Khas* is undergoing repair; but the *Diwan-i-Am* wants putting in order and further ruin arrested. The *Turkish wife's house*, which is exceedingly beautiful and rich in carving, has yet to receive from Mr. Heath its share of attention.

The *hammam of the Khas Mahal* wants cleaning out and repairing.

Akbar's *Khwabgah* requires cleaning out; and his *kutchery*, now the dâk bungalow, wants attention, much of the screen-work being broken.

The *Jodh Baie* place has to receive some petty repair, and it will be an improvement to open out the various doorways, which were closed up when the building was used as a tahsil. At present there is only one way of getting into the building.

What remains of the painted work on the walls of *Miriam's house* should be preserved.

The grounds all about the *Fatehpur-Sikri* buildings have been vastly improved by clearing débris and planting trees, but more can be done with advantage. It would also be a good thing to have the name of each building put up.

Sikandra.—Great damage is said to have been done to the buildings at Sikandra when Lord Lake took Agra in 1803. The minarets of the gateway had their tops knocked off, and the beautiful tomb building suffered greatly.†

Building at Sikandra.

The principal entrance at Sikandra has been greatly improved by the restoration of its handsome inlaid work. The interior of the gateway has yet to be cleaned out, as well as the buildings which flank it. The whole wall and the three other gateways surrounding the tomb require preservative measures. The grounds

* In 1870 I had casts made of columns in the *Panch Mahal*, of the throne column in the *Diwan-i-Khas*, and of columns and carving in the *Turkish wife's house* (a). These are all exhibited at the India Museum in London.

(a) "Buildings in the neighbourhood of Agra"

† This I find to be incorrect: the damage was done before Lord Lake's time. —H. H C., 29-8-82.

are much improved by Mr. Lawrence,* the Collector, but a great deal remains to be done when funds are available. The mausoleum itself has been put in splendid condition, and the repairs are nearly completed. Work is still going on in the lower colonnade at some of the small tombs. The vestibule leading down to the actual resting-place of Akbar has beautiful, painted work in the dome and on the walls, which will no doubt receive preservative remedies.

The Taj. The Taj.†—The entrance gateway of *the Taj* has been repaired most successfully, and the enclosing walls of the gardens are now being put in order.

The *mosque* and its pendant, or "Jawab," are in good order; but in restoring and renovating the interior paintings great skill and care are necessary. Decorative painting is almost as obsolete an art in Lahore, Delhi, and Agra as the tile-work for which their buildings are renowned; but the difficulties of successfully renovating decayed and faded frescoes are not insuperable, and I have no doubt that men can be found, perhaps in Kashmir, but certainly in Persia, who can do the work.

The *Taj* itself has been most successfully repaired, and shines out in all the glory of the original conception.

The actual tombs of Shah Jahan and his wife, in the crypt, have yet to receive slight repairs to the mosaics and some of the mosaic work in the chambered corridor above wants attention

Gardens at Agra.—The garden at the Taj is most beautifully kept up, but the water channels and fountains are often empty; and seeing that a canal is no great distance off, it would be an improvement to bring water straight into the garden, instead of trusting to raising it from the river by bullock-power. The gardens at *Sikandra* and at *Itmad-u-Dowlah* stands in need of larger expenditure than can be afforded from local funds at the disposal of Mr. Lawrence, the Collector; and it would greatly enhance the value of the restoration of the buildings at those places if sufficient money were granted to permit of the enclosures being put in substantial order, after which local resources can keep them up.

Drawings of buildings under the Archæological Division, North-Western Provinces.

Mr. Heath has got some 100 plans and drawings of the buildings in his charge for preservation, and they form a valuable means of studying native architecture. It would, I think, be advisable in time to more profusely illustrate ornamental details of tile-work, painted decorations, carvings, metal and wood work; but I am strongly of opinion that the drawings should be reproduced in the *best possible style and published in single plates for use in schools of art throughout India and for sale to artisans.* Before suggesting that Government should sanction any particular sum for the purpose, it would be advisable to send one drawing to a publisher and to get a specimen done and an estimate of cost. The best publishing firm in the world for architectural and art works is Morel

* The grounds were a mere waste when Mr. Lawrence commenced to clear them, and the jungle exceedingly thick on one side of the mausoleum.

† "Great attention has been given to *the Taj*. The restoration of the eastern façade has been almost completed. The broken marbles of the walls and vaulted openings have been replaced by new slabs, and the renovation of the inlaid work has been steadily going on. The interior of the building is now in an almost perfect condition. The great gateway has been repaired, and its pinnacles, which had fallen or been blown down, have been re-erected. Notwithstanding all this, it will take several years of careful and patient labour before *the Taj* and its surrounding buildings can be placed in a thoroughly safe and satisfactory state."—(*Extract from Sir John Strachey's Minute of 25th August 1875.*)

& Co. of Paris; and the reproduction of these drawings could be entrusted to them with great confidence in a satisfactory and highly creditable result.

H ii.

Memorandum on the Conservation of Ancient and other Architectural Remains in India.

Lists of principal buildings.

The accompanying lists of buildings and monuments in—

Bengal,	Central Provinces,
North-Western Provinces and Oudh,	Hyderabad,
The Punjab,	Mysore,
Rajputana,	British Burma,
Central India,	Madras,

Bombay, &c.,

which I drew up recently, have been compiled from official lists and from such books as Fergusson's Indian Architecture, Rousselet's India and its Native Princes, General Cunningham's numerous Reports, &c.

The information available from these sources is not entirely complete; but the buildings named are among those of the first importance, and are sufficiently numerous to convince even the least appreciative of the large field which exists for conserving the historical art monuments of India.

Conservation.

2. I use the word "conservation," because it seems to include all that is required for the protection of works of art, and for the production of permanent and convenient methods for facilitating their useful study.

Under conservation may be included—

(1) Custody.	(3) Restoration.
(2) Preservation.	(4) Illustration.

Custody and preservation would appear to be duties which the local civil authorities could undertake satisfactorily, whilst the work of restoration and illustration would require a staff possessed of special qualifications.

Custody.

3. *Custody* will take some time and trouble to organise properly: an unintelligent and sleepy chowkidar would be no efficient guardian. I would recommend that a corps of native custodians be enrolled in each district according to requirements, selected, perhaps, from pensioned police or soldiers. They should wear a distinctive badge, and have clear instructions briefly engraved on it.

District Manuals.

4. It would be of some educational benefit to compile for each administrative area a short and popular account of the most interesting buildings and monuments. These, printed in English as well as the Vernacular, would possibly tend to create greater interest and respect.

5. It might also be worth while to affix to some of the most important buildings a notice in some imperishable material, such as enamel or glazed pottery, giving the name and date both in English and the Vernacular.

Buildings to have their names and dates affixed to them.

Nothing exposes a ruin to wanton ill usage so much as ignorance of its history, except, indeed, in the case of those who ought to know better, and who, if not deterred by authority, remove or chip off parts of a monument *because it possesses historical or artistic traditions.*

Preservation.

6. *Preservation* is a work which native keepers might partially attend to, as, for instance, in respect of—

(*a*) cleanliness,
(*b*) keeping down vegetation.

But

(*c*) the removal of thick jungle without injury to old buildings,
(*d*) clearing ruins of débris,
(*e*) setting up fallen portions of a building,
(*f*) collection of carved or other ornamental fragments,
(*g*) erection of enclosures to keep off cattle, &c.,

would require periodical and special measures to be undertaken by district authorities.

Restoration.

7. *Restoration* is a work which could only be undertaken after the collection of very full information. It is in itself a very delicate affair, for, unless it be first rate, is best left alone. The costly nature of such work is, moreover, a good reason for treating each case in detail and after full consideration.

8. Mr. James Fergusson could furnish a list of important architectural monuments which should be kept in a constant state of preservation or restoration, and I think he would probably include some of the following :—

Bengal—

List of some fine buildings that are worthy of repair or restoration.

Shir Shah's Tomb at Sasseram.
The Golden Mosque at Gaur.
The Adinah Mosque at Maldah.
Temple at Sadri at Parisnath.
Temples in the Puri District, Orissa.

The North-Western Provinces and Oudh—

The Jama Masjid at Badaun.
* Jama Masjid at Jaunpur.
* Atala Masjid at Jaunpur.
* Akbar's Palace, &c., at Fatehpur-Sikri.
* Temple of Govind Deva at Bindrabun.
* Akbar's Tomb at Sikandra.
* Palace buildings in the Agra Fort.
* The Taj Mahal, Agra.
* Tomb of Itmad-u-Dowlah, Agra.
Hall in the Fort at Allahabad.
Temple of Vishveshwar at Benares.

N.B.—Buildings marked* are under the North-Western Provinces Archæological Division.

The Punjab—

The Kutub Minar, Delhi.
Humayun's Tomb, Delhi.
Jama Masjid, Delhi.
Palace buildings in the Fort of Delhi.
Golden Temple at Amritsar.*
Tomb of Ranjit Sing at Lahore.
Palace buildings in the Fort at Lahore.
Tomb of Jahangir at Shahdara, Lahore.
Shah Gardez in Multan.
Shah Shams's Tabrez in Multan.

Rajputana—

The Arhai-din-ka-Jhompra, Ajmir
Tower of Victory at Chittor.
Jaina temples at Mount Abu.
Palace at Amber, near Jeypore.
Palaces, Udaipur.

Central India—

Railings and Gateways of the Great Tope at Sanchi
Palace buildings in the Fort at Gwalior.
Tomb of Muhammad Ghaus at Gwalior.
Temples at Khajuraho.
Jain Temples at Gwalior

Central Provinces—

Remarkable Temple and circular enclosure at Bhera Ghat.
Ruins at Karanbel near Towar
Fine Temple at Janjgir
Temples at Markundi.

Haiderabad—

The Kylas at Ellora.
Caves at Ellora.
Cave at Ajunta.
Temples at Markur, Berar.

Maisur—

Temples at Hullabid.
Temples at Belur.
Jaina Bastis at Sravana Belgula

British Burma—

Information too meagre.

Madras—

The Seven Pagodas, Madras.
Temple at Chillambaram, South Arcot.
Hampi
Tope at Amravati.
Tirumala Naik's Palace at Madura.

Bombay—

Temple at Ambernath.
Buildings at Bijapur.
Buildings at Ahmedabad.
Temples at Parudkal, Dharwar.
Mosque and Tombs at Tatta, Sind.

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* The Sikhs contribute liberally towards the maintenance of this building, and restorations are going on. When I visited the temple on the 11th April last, the place was so thronged with natives that I had no opportunity of closely examining the building.

9. The collection of illustrative matter has an importance quite apart from historical or archæological interest, as it is by such means alone that the architecture and art of India can be studied. Builders and artisans of this great country cannot be expected to keep alive the instincts of their styles, except by making themselves acquainted with the varieties of the ancient and modern arts of India. (In connection with this subject, I lately drew up a brief note on industrial art, which I submitted to Government. See Appendix G, page xvi.)

Illustration.

Duties of a Conservator of Ancient and other Architectural Remains in India.

10. To inaugurate the scheme of conservation, it will be necessary to select a Conservator, whose duty it should be—

(a) to convey to Local Governments and Administrations the wishes of the Government of India concerning the custody and preservation of buildings;
(b) to arrange for the production of local manuals, &c.;
(c) to inspect buildings with the view of advising Government as to the measures necessary for repair or restoration;
(d) to direct operations of draftsmen for the purpose of collecting illustrations of Indian ornamental art.

11. For repair, restoration and illustration, a special organisation will be required for various localities. There can be no better plan than the constitution (after the plan of Sir John Strachey) of a special charge in the Public Works Department of each great Province for the preservation of works of art and antiquity.

In many cases of repair, &c., Local Governments have no better agency than that of the Public Works under their orders; but it is only by those who take an interest in such work that it can be properly carried out.

Mr. Gibbs of the Bombay Civil Service, when Assistant Commissioner under Sir Bartle Frere in Sind, arranged for the repair of the Jama Masjid at Tatta, and says, in a Minute on the Bombay Archæological Survey dated June 1873, that he got the work done by enlisting the sympathies of the Muhammadan community; and it was afterwards estimated that the cost would have been four times the amount if the repairs had been done by the Public Works Department.

Divisions for special repair and preservation.

12. For special repairs, preservation and illustrations it will probably be necessary to create divisions similar to that in the North-Western Provinces for—

(1) Bengal.
(2) The Punjab.
(3) Central Provinces. Rajputana. Central India.
(4) Bombay.* Haiderabad.
(5) Madras. Maisur

In anticipation of the appointment of these establishments being sanctioned, I would recommend that some of the buildings under the immediate jurisdiction of the Government of India, mentioned in paragraph 8, should be visited with the view of ascertaining the means and approximate cost of undertaking necessary repairs or restoration.

* Major Mant, R.E., was appointed Curator of Ancient Buildings for the Bombay Presidency in 1878, and was working in correspondence with Mr. Burgess, the Archæological Surveyor in Bombay. Enquiry will be made as to how far he has been able to undertake repairs, and whether he has any, and what, establishment.

13. General Cunningham in 1874 made the recommendation that all ancient buildings not in use for worship should be placed under the sole charge of the chief civil authority of the district; but it is specially in the case of fine buildings associated with military establishments that very clear ruling is required as to what should be in the charge of the civil authorities. All buildings of historical or artistic interest in forts like those at Delhi, Lahore and Gwalior, should be taken out of the charge of the military authorities and placed in the charge of the Local Government. At Agra the palace buildings and other works of art in the Fort are in the charge of the Executive Engineer of the Archæological Division of the North-Western Provinces; and this arrangement presents no difficulties, as in any case of disturbance the whole of the buildings would, like those in the city of Agra outside the Fort, come under military occupation and charge, and the civil authority temporarily superseded.

Civil authorities the proper custodians of artistic buildings.

In Madras the custom is to consider the charge of all buildings of historical or architectural interest to be vested in the revenue officials of each district, excepting those that are under the Public Works Department for repairs.

There is no organisation yet established in Madras for either investigating or conserving the wonderful and beautiful monuments of that Presidency.

14. As far as the discovery of buried ruins or works of art is concerned, the Treasure Trove Act of 1878 appears to furnish the civil authorities with all necessary power for dealing with valuable carvings, inscriptions, coins, or other discoveries; but in regard to the preservation of buildings and monuments, unless existing legislation is sufficient, an Act similar to Sir John Lubbock's would seem requisite.

Act for the Preservation of Monuments.

H iii.

Bengal.

Some Principal Ancient and other Native Architectural Buildings in the Lower Provinces of Bengal.

Name of building or group of buildings	General character.	Custody	Preservation.	Restoration.	Photographs.	Drawings or plans.
BURDWAN DIVISION. *In the official list some 34 objects of interest are described.*						
Tomb of Bahram at Burdwan Shir Afghan, the first husband of Nur Jahan, said to be buried here.	Built 300 years ago the tomb of a Muhammadan poet Bahram Sakkar.	Custody desirable	Said to be fair	Special investigation necessary.	None	None.
Bishenpur Temples, in the Bankura District.	Brick and terra cotta buildings, history unknown	Ditto	Fair, but overgrown with trees.		None	None.
The so-called "Five Jewelled" Temple at Gaoltur, in the Midnapur District.	About 132 years old, said to be very ornamental.	Ditto	Overgrown with vegetation.		None	None.
Khelargarh, in the Midnapur District.	A fort dating 1400 A D, with two curious sculptures of a man and his wife on horseback	Ditto	In ruins		None	None.
Minarah at Panduah, in the Hughli District.	A tower probably of victory, used as a minarah, an interesting remain, date thirteenth century.	Ditto	......		None	None.
PRESIDENCY DIVISION. *In the official list some 50 objects of interest are described.*						
Hindu Temple, Jartar Deul, at Diamond Harbour, 24-Pergunnahs.	A specimen of very fine brick work the bricks said to be carved, probably terra cotta, date 975 A D.	Custody desirable		Special investigation necessary.	None	None.
The Sat Gumbaz, or Sixty Domes, at Bagarhat, in the Jessor District.	A massive brick building date about 1458 A D, built by Khanja Ali.	The inside is kept clean by an old man, who gets money from pilgrims.	The masonry in fair order, repairs wanted on the surface, the roof is covered with jungle		None	None.
Pir Ali's Tomb at Bagarhat, in the Jessor District.	Date about 1458 A.D.	In charge of two fakirs, who hold 36[?] bighas of land for the service of the place under a very ancient grant.	Repairs wanted		None	None.
Temple of Krishna at Muhammadpur, in the Jessor District.	An elaborate building with tracery and terra-cotta ornament, date 1703.	Custody probably desirable.	In fair order; but signs of decay are showing		None	None.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
RAJSHAHYE AND COOCH BEHAR DIVISIONS *In the official list some 36 objects of interest are described.*						
The Boddal Pillar, in the Dinagepur District.	A relic of the Pal Kings	Custody desirable	The pillar is still standing	Special investigation necessary	None	None.
Two Muhammadan Shrines at Debkot, in the Dinagepur District	The report calls Debkot the first Muhammadan capital of Bengal, very early inscription of Kaikoor Shah at one shrine.	Ditto	Deserves to be preserved	Special investigation necessary	None	None.
Muhammadan Tomb at Hemtabad, called Bazar-ud-din, in the Dinagepur District.	A mosque close to the tomb, in fair preservation, there are numbers of Hindu carved pillars and stones about signs of Buddhist topes in the neighbourhood	Ditto	Much neglected	Special investigation necessary	None	None.
Temple of Gopal at Gopalgunge, in the Dinagepur District	Temple dating from 1742 A D, with curious brick and terra cotta ornament.	Ditto	Surrounded by jungle and falling into decay	Special investigation necessary	None	None.
Temple at Kantonagar, 12 miles from Dinagepur.	Finished in 1722, a brick building covered with terra-cotta.	Ditto	Preservation desirable, is said to be kept in repair by the family of the late Raja of Dinagepur	......	Has been photographed.	Details would be valuable.
Temple of Siva at Tulpesh, in the Jalpaiguri District	The most conspicuous ruin in the district, built of very durable brick, began 250 years ago	Ditto	Fair	.....	None	None.
DACCA DIVISION. *In the official list some 36 objects of interest are described.*						
So-called Tomb of Ghias-ud-din at Sonargaon in the Dacca District.	The stones beautifully carved	Custody necessary	The report says it might be easily repaired.	Special investigation necessary.	None	None.
Gharibullah's Mosque at Sonargaon, in the Dacca District.	A modern mosque, 1768 A.D, with pinnacles of glazed pottery.	Ditto		Special investigation necessary.	None	None.
Old Mosque at Goaldi at Sonargaon, in the Dacca District.	Date 1519 A D.; of red brick with carved stone-work inside and carved brick (terra-cotta ?).	Twenty-six years ago used for worship, but now abandoned for a more modern building close by.	Threatened with ruin	Special investigation necessary.	None	None.

BHAGALPUR DIVISION

In the official list some [illegible] [illegible]

The Khajeki Masjid or [illegible] mosque at Gaur, Maldah District	A [illegible] building 375 years [illegible] built in the reign of Sultan Husain Shah King of Gaur	Custody necessary	[illegible] repair [illegible]	[illegible]	None known	See Ravenshaw
Mosque called the Kadem Rasul at Gaur	An interesting and [illegible] building [illegible] 390 years [illegible] [illegible] work [illegible] moulded bricks	Not known [illegible]	[illegible]	The expediency of [illegible] investigation	See Fergusson	
Minar at Gaur	According to Ferguson [illegible] [illegible] late 13 2 15 A D	[illegible] small	[illegible]	[illegible]		
The Golden Mosque at Gaur	Remains of a fine stone building 304 years old	Ditto	[illegible]	[illegible]	None known	
Kutub Shah's Graveyard at [illegible] or Panduah in the Maldah District	[illegible] many [illegible] [illegible] which [illegible]	The [illegible] taken	[illegible]	[illegible]	Ditto	None known
The Adinah Masjid and Tomb of Sikandra at [illegible] Hazrat Panduah Maldah	[illegible]	[illegible]	[illegible]	[illegible]	See Fergusson	See Fergusson
Mausoleum of Jalal [illegible] at Hazrat Panduah	[illegible] of [illegible]	Ditto			None	None
Jama Masjid at [illegible] from [illegible] Pergunnah	A [illegible] built in [illegible] Akbar [illegible]	Ditto	[illegible]		None known	None known
Jain Temple at Par[illegible] the [illegible]	[illegible] Jain pilgrimage	Ditto	Pr[illegible]	[illegible]	[illegible] photographs	Fergusson [illegible] would be valuable.

CHITTAGONG DIVISION

In the official list [illegible] 13 [illegible]

No building, which appear [illegible]

Principal Ancient and Architectural Buildings, &c.—concld.

PATNA DIVISION.

In the official list some 60 objects of interest are described.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Nalanda Monasteries at Burgaon, in the Patna District.	Buddhist ruins, full of interest; many sculptures of great beauty.	No information; excavations have been made.	Ruins ...	Impossible ...	None ...	None.
Ruins of Rajgir in Behar subdivision, in the Patna District.	Buddhist ruins of Rajagriha, the ancient capital of Magadha.	Custody desirable ...	Ruins ...	Ditto ...	None ...	See Cunningham.
Ruins and great Buddhist Temple at Buddha Gya, in the Gya District.	The temple is a fine and most interesting brick building; masses of carved stones to be found around the ruins; date first century B.C.	Ditto ...	*Have been completely restored at a cost of some Rs. 80,000, and is just completed* (1881-82).	... ..	Have been photographed by Mr. Beglar, Executive Engineer.	See Cunningham and Fergusson and Rajendra Lalla Mitra.
Buddhist Temple and Caves in the Barbar Hills in Jahanabad subdivision, Gya District.	The caves are carved in the granite rock, and vary in age from 200 to 250 B.C.; among these, the celebrated "Khana Chopar," the "Sudama," and "Lomas Rishi" caves.	......	Good ...	......	......	See Fergusson and Cunningham.
Buddhist remains at Dharawut, north of the Barbar Hills, in the Gya District.	Extensive mounds about the present village; also a small temple with a standing figure of Buddhisata.	Custody desirable ...	Ruins ...	......	None known of ...	None known of.
Remains at Konch, in the Gya District.	Mounds and Buddhist figures scattered about! also a large temple with beautiful moulded bricks.	Custody probably desirable.	The temple suffers year by year from rain, and will soon be a mass of rubbish if nothing is done.	......	Ditto ...	Ditto.
Shir Shah's Tomb at Sasseram, in the Shahabad District.	A fine old Pathan tomb; about 1550 A.D. One of the finest specimens of Pathan art in Bengal.	Well worth custody ...	*An estimate for restoring has been made, and the work has been begun by Mr. Beglar.*		Has been photographed by Mr. Beglar, Executive Engineer.	See Fergusson.
Ruins and Buildings at Rohtas Fort, in the Shahabad District.	Shir Shah captured this fortress in 1539 A.D.; Man Singh, Viceroy of Bengal, erected all the buildings now existing in 1654.	Ditto ...	Ruins; more information required.	......	None known of ...	None known of.
Bhim Singh's Lat, an Edict Pillar of Asoka near Sarya, 18 miles south-west of Muzaffarpur.	The pillar is a monolith with a carved lion capital; height above ground about 30 feet; date about 250 B.C.	Since 1793 Englishmen have cut their names on the pillar; is in the court-yard of a Brahman's house.	Good ...	......	Ditto ...	See Fergusson, Cunningham, and Kittoe.
Buddhist Mounds and Edict Pillars in the district of Champaran.	There is a fine lion pillar at Lauriya Araraj, 15 miles from Bettiah.	Custody desirable ...	Ruins ...	......	Ditto ...	See Fergusson and Cunningham.

ORISSA DIVISION.

In the official list some 23 objects of interest are described.

Hindu Pillar at Chandeswar Jaipur, in the Cuttack District	A stone column about 22 feet high supported originally a Garuda,* which lies half a mile off	Custody desirable ..	Fair ..	The question of how far restoration is possible or expedient requires special investigation.	Has been photographed. See Fergusson	None known.
Temple of Jaganath at Puri, in the Puri District.	Built 1198 A D ..	Used for worship, &c	Fair .		Ditto	See Fergusson and Babu Rajendra Lalla Mitra.
Great Temple at Bhuvaneswar, in the Puri District.	Date about 617 A D, a very elaborate Hindu temple	Used for worship .	Fair .		Has been photographed.	See Babu Rajendra Lalla Mitra's book.
The Black Pagoda or Kanarak at Kanarak, in the Puri District.	Date about 873 A D (there are various theories as to date) a very elaborately carved Hindu building	Custody seems desirable	Fair .		Ditto	See Babu Rajendra Lalla Mitra's *Antiquities in Orissa.*

CHOTA NAGPORE DIVISION

In the official list some 11 objects of interest are described.

Fort and Palace of the Pachete Rajahs at Pachete, Manbhum	Ruins temples, towers, &c, of fine stone and terra cotta work	Apparently none ..	Ruins .	----	None ...	None.
Jain Temples at Telcupy, Manbhum	Stone temples, with elaborate carvings,	----	Ruin the river Damuda is washing the buildings away	----	None .	None.

* N B —The sacred Vulture of Vishnu,

N. W. P. and Oudh.

Some Principal Ancient and other Native Architectural Buildings in the North-Western Provinces and Oudh.

Name of building or group of buildings	General character.	Custody	Preservation.	Restoration	Photographs.	Drawings or plans.
In an official list of 1875, 157 objects of interest are mentioned.						
A Stone bearing one of Asoka's inscriptions at Harripur, near Kalsi, Dehra Dun District	Is in a good state of preservation but the inscription is somewhat worn by age	----	----	----	----	----
Large Figure of Buddha and lions at Paindhat, Mainpuri District.	Is an object of devotion, protected by a Hindu Temple.	----	Said in 1868 to be in good preservation	----	----	----

N. W. P. and Oudh.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings	General character	Custody.	Preservation.	Restoration	Photographs	Drawings or plans.
Stone Elephant and Capital at Sankissa, F[illegible]ah District	The capital of one of Asoka edict pillars, 250 B.C.	[illegible]	...	....	..	..
Ruined City of Kanauj, formerly the Hindu capital of Northern India	The remains of interest are—the ruins of the [illegible] Rang Mahal [illegible] Jami Masjid [illegible] the [illegible] Masjid [illegible] the [illegible] there are [illegible] covered with [illegible] bricks, [illegible], &c	Custody most desirable	....	....	..	See Cunningham's *Archæological Report*, Vol. I
Buddhist T[illegible] at Sarnath, near Benares	A large [illegible] with sculpture of great antiquity, date about 500 A.D.	Ditto	*Arrangement for repairs to be discussed*	..	Has been photographed.	See Cunningham and Fergusson.
Gateway of the Jami Masjid at Badaun	A fine specimen of Ghori Pathan building	Custody desirable	Mr C[illegible] Lieutenant Governor gave Rs. 500 for repairs. Well worth preserving	A return of 1875 [illegible] clusters [illegible] to the right and left of the [illegible] have been pulled down [illegible] material for repair [illegible] the main part of the building	None	None.
J[illegible] at Mah[illegible] Hamirpur District	Fine [illegible] buildings, 800 to 11[illegible] A.D.	*Repairs commenced*	....	....	Several photographs taken.	....
Jami Masjid at Jaunpur	1419-51 A.D. [illegible] of the Jaunpur [illegible] type	*Under the Archæo[illegible]* [illegible]	....	....	Ditto	See Fergusson.
The Atala Masjid at Jaunpur	Very ornate and [illegible] Jaunpur [illegible] building		....	....	Ditto	....
Lall Darwaza Mosque, Jaunpur	This is the smallest of the mosques in Jaunpur [illegible] the mixed style		....	....	Ditto	See Fergusson.
Akbar's Palace at Fatehpur-Sikri, near Agra	A beautiful collection of buildings of a mixed Hindu and Muhammadan [illegible]		....	....	Ditto	See Fergusson and *Buildings near Agra* by Cole.
Hall in the Palace at Allahabad	Pathan [illegible] time	Now used as an arsenal	....	*Whitewash should be removed.*		See Fergusson.

Tomb of Feroz Khan, near Agra ...	Erected in Akbar's time. Very handsome.	*Has* [illegible]	......	*Under the Archaeological Department, North Western Provinces. Mr Heath has prepared drawings*	Has been photographed	
Hindu Temple at Brindaban, near Muttra	Erected in 1592-1615 A.D. A remarkable building, [illegible] mixture of Hindu and Muhammadan art	*Has* [illegible]	......		Ditto	See Fergusson and Cole.
Akbar's Tomb at Sikandra	A very beautiful mausoleum .	[illegible]	......		...	See Fergusson
Fort of Agra	Contains fine buildings of Jahangir and Shah Jahan	*Is almost completely re-novated*	......		Has been photographed	
Taj Mahal ..	A beautiful marble tomb of Shah Jahan and his wife	*Has been completely restored*	......		Ditto	See Fergusson. Well drawn.
Tomb of Itmad-ud-Dowlah at Agra	Built in the reign of Jahangir, 1605-28; a beautiful building of marble and mosaics	Although [illegible] fresco painting	......		Ditto	..
Tomb of Shah Abdul Razzak at Jhinjhana, Muzaffarnagar District	Is a handsome structure built of stone and brick and has a [illegible] tile dome	......	Said in 1875 to be kept in repair by the heirs of Shah Abdul Razzak	......	......	......
Masjid in the old City of Koel, Aligarh District	This mosque was built 140 years ago on a site [illegible] minaret [illegible] 1253 A.D. which after the Mutiny was pulled down for municipal improvements	......	......	......	......	......
Mosque of Nabi Sahib in the market place, Muttra	Built by Ghulam Nabi, Governor of Muttra 1660 A.D.; a central building with four handsome minarets with coloured tile work	Worthy of custody and preservation	......	......	......	......
Temple of Hardeoji at Goverdhan	A [illegible] building of red sandstone built [illegible] years ago by Raja Bhagwan Das of Multan	Worthy of custody	Was partly destroyed by Aurangzib and repaired [illegible] by the Raja Jai Singh of Jaipur	......	......	......
Zamindar's House in Labhowa near Shikohabad, Mainpuri District	Built some 50 years ago; said to be a very remarkable specimen of modern domestic native art	......	...	......	......	......
Jama Masjid in Pilibhit, Bareilly District	A handsome building, said to be well worth preserving	......	Used to be repaired by Government before the Mutiny	......	......	......
The Sumeri temple at Ramnagar in the Benares District	A handsome temple begun about 100 years ago, completed by the present Raja of Benares; covered with handsome bas reliefs	......	Kept in repair by the Maharaja of Benares	......	Has been photographed.	......
Chini-ka Roza at Agra ..	Of Aurangzib's time; a mausoleum covered with blue enamel.	Custody desirable .	Much ruined and defaced	......	......	See Cunningham.
Temple of Vishneshwar at Benares	About 150 years old .	In use by the Brahmans	......	......	......	See Prinsep's *Views in Benares*
Ghusla Ghat, Benares ..	A modern stone building	In use ..	......	......	......	See Prinsep's *Views*, and Fergusson.

Punjab.

Some Principal Ancient and other Native Architectural Buildings in the Punjab.

Name of building or group of buildings	General character	Custody	Preservation	Restoration.	Photographs	Drawings or plans.
			DELHI DISTRICT *In the official list some 91 buildings are described*			
Ruins at the Kutub, near Delhi	Historically of the highest interest, being the most important mark of the Muhammadan conquest of India is situated about 11 miles from Delhi	It is not known whether the custody of all buildings is of a systematic character	*The Kutib Minar is well preserved other buildings require attention all buildings should be made secure and destructive vegetation kept down*	Repairs about to be undertaken.	Photographed by Bourne and Shepherd and others Also see *Architecture of Ancient Delhi* by H H Cole published by Arundel Society	See Fergusson and Cunningham.
Tomb of Maulvi Jamali Kamal, near Delhi, to the south east of Metcalfe House at the Kutub	Decorated in a beautiful and singular way with colored encaustic tiles date 1535 A D	Custody desirable .	*The ground has been purchased*	Repairs about to commence	No photographs known to exist	*Drawing made in my office —H H C.*
Ruined Tombs and buildings around Delhi	Chiefly Muhammadan and Pathan .	Ditto ..	*Very variable preservation in many cases desirable*	..	Some photographs by Bourne and Shepherd	Many noticed in Fergusson also see Cunningham, Vol. IV *Many drawings in my office — H H C*
Humayun's Tomb, near Delhi ..	Early specimen of Mogul architecture 1554 A.D, in marble and sandstone	Systematic custody desirable	*Ground about to be laid out*	..	Photographed by Bourne and Shepherd.	*Drawings in my office —H H C.*
Chausath Khamba, a tomb 3 miles from Delhi, date 1600 A.D	A Muhammadan tomb decorated with beautiful cut marble screen work	Ditto	In fair order but some screens mutilated	Probably desirable	Ditto	See Cunningham, Vol. IV Details of tracery would be valuable.
Jama Masjid in Delhi, date 1629 58 *A.D.*	A beautiful Mogul mosque still in use	In custody of the Muhammadan priest	*Slight repairs wanted*	......	Ditto	Illustrated in Fergusson s Architecture
Asoka's Pillar, on the ridge in the civil station, Delhi.	A Buddhist Lat about 300 B C	Systematic custody desirable	Recently set up (1875)	Unnecessary	None known	None known.
Zinat ul Masjid ..	A mosque with tombs date 1710 A D	......	.. ...	. ...	Ditto	Ditto
Fatehpuri Masjid	*Mosque at end of the Chandni Chauk,* 1610	*In use*	*Repairs and improvement is commenced*	......	.. ...	
Palace in the Fort at Delhi, date about 1638 *A D.*	Built by Shah Jahan The Dewan Khas is richly ornamented with mosaic on white marble and a painted ceiling other buildings such as the Moti Masjid and King s Bath are highly ornamental and full of interest	In some kind of custody more information wanted	*Repairs have begun and will be thoroughly carried out*	.. .	Bourne and Shepherd have photographs.	Plans said to be in the Military Department See also Fergusson. *Drawings in my office —H. H. C.*

Jaina Temple in Delhi ...	Built in the beginning of the present or end of the last century; singular for its beauty and ornament.	In use ..	......	......	Ditto	Details of the structure would be interesting. See Fergusson.

GURGAON DISTRICT.

In the official list some 48 buildings are described.

Lal and Kala Domes, near the hills by Sohna, about 1 mile from the Town of Gurgaon.	Buildings known as the red and black domes; they are decorated with sculptures and are reputed to have been built by Khanzadas; date unknown.	Custody desirable ...	Dilapidated; information wanted.	......	None ...	None.
Kutub Khan, in the boundary of the Town of Gurgaon.	A domed building of chunam and stone built by Kutub Khan, Khanzada, Mansabdar of the Emperor, about 400 years ago.	The inhabitants of Sohna use it as a cattle-shed.	Dilapidated; is handsome and should not be allowed to decay further.	......	None ...	None.
Aliwardi Mosque, 3 miles from the Tahsil Gurgaon.	A mosque and tomb in chunam and red stone; the tomb has a handsome trellis screen, built by Nawab Aliwardi Khan about 150 years ago.	Not used ...	Dilapidated; the tomb deserves rescuing from decay.	......	None ...	None.
Sohna Mosque, two hot and cold springs.	The old buildings are said to be a thousand years; the mosque dates from Shah Alam.	Used by inhabitants; mode of custody unknown.	Good ...	......	None ...	None.
Farukhnagar Mosque, in the Town of Farukhnagar.	Built by the Nawab of the place in the reign of Muhammad Shah, 1553-54 A.D.; decorated with sculptures.	Used for worship ...	Good ...	......	None ...	None.
Hindu Temple at Sit Sai, 18 miles from Tahsil Palwal.	A building of chunam and stone with colored frescoes, about 224 years old.	Ditto ...	Fair ...	......	None ...	None.
Modern Tank and Chuttri at Chuhiwala.	The chuttri is of chunam and stone, and is decorated with sculpture.	The tank used for bathing; no information about custody.	Good ...	......	None ...	None.
Mosque at Malab ...	A building of chunam and stone with colored decorations; built 200 years ago.	Used for worship; no information as to custody.	Good ...	......	None ...	None.
Muhammadan Shrine in memory of Allah Yar Khan in Firozpur.	A monument, 40 feet square, of stone and chunam, with ornamental carvings; built 275 years ago.	A fakir lives in the shrine; no other custody known.	Fair ...	......	None ...	None.
Jama Masjid, in the Town of Firozpur.	A modern building with colored decoration.	Used for worship ...	Fair ...	......	None ...	None.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character	Custody	Preservation.	Restoration	Photographs	Drawings or plans.
KARNAL DISTRICT						
In the official list some 55 buildings are described.						
Tomb near Karnal, on the Trunk Road, called Durgah Kalandar Sahib	A masonry enclosure, with a mosque and fountain the tomb itself is of marble with sculptured decoration. It was built by Ghyas-ud-din Emperor of Delhi in memory of a fakir 1325 A D)	Sacred place of Mu[illegible] [illegible] to cus[illegible]	Good	—	None	None.
Muhammadan Tombs in the city of Panipat	Decorated with marble sculptures, date 1325 A D	[illegible] Muhammadan place [illegible]	Good	—	None	None.
Kabul Bagh, 1 mile from Panipat	Formerly a mosque and garden built by the Emperor Baber to commemorate the victory over Ibrahim Lodi, built 152[illegible]	No custo[illegible] known of	The garden has disap[illegible] the mosque requires repairs	—	None	None.
Mosque of Shaikh Tyub, inside the city of Kaithal	A masonry building of the time of Akbar the cupola is covered with enamel	Not known	Requires repair	—	None	None
HISSAR DISTRICT						
In the official list [illegible] buildings are described						
Jama Masjid, in the Town of Hissar	A brick building 350 years old decorated with coloured tiles	[illegible] to [illegible]	Fair	—	None	None.
Mosque near Hissar in the sarai close to the Delhi Gate	A brick building 345 years old decorated with coloured tiles	Ditto	Fair	—	None	None
Tomb near Hissar	An old domed brick building with coloured tile decoration said to be 600 years old	[illegible]	[illegible] neglect[illegible]		None	None.
Barsi Darwaza, one of the gates of Hansi.	A brick gate, decorated with coloured tiles	No information as to custody	Fair	—	None	None
Domed Shrine at Tobana	A brick building, decorated with tiles of various colours built [illegible] years ago by Assad Khan Pathan	Not [illegible] information [illegible]	Fair	—	None	None
Mosque in Tobana	A brick building erected 2[illegible] years ago by Mir Fazl [illegible] decorated with red, blue and [illegible] tiles	[illegible]	Fair		None	None

ROHTAK DISTRICT.

In the official list some 29 buildings are described.

Seven tombs at Jhajjar ...	These are of stone, Muhammadan in style; and one building has colored decoration (tiles?); about 250 years old.	Not known ...	Good ...	......	None ...	None.
Alamgiri Mosque at Badli ...	A stone building erected by Aurangzib Alamgir; about 200 years ago.	Used for worship; custody not known.	Needs repairs ...	......	None ...	None.

SIRSA DISTRICT.

In the official list some 1 buildings are described.

Hindu Temple outside the town of Hissar.	A plastered brick building with colored ornaments; about 500 years old by repute.	Used by Hindus; custody not known.	Fair ...	......	None ...	None.

UMBALLA DIVISION.

In the official list some 10 buildings are described.

Muhammadan Tomb, 12 miles west of Shahabad Thana.	A masonry building about 1710 A.D.: is the tomb of Shah Blik, and of an architectural character.	Used by Muhammadans for worship; mode of custody unknown.	Very good ...	......	By Lieut. Parker, Assistant Commissioner. Umballa.	None.
Jama Masjid at Thanesar ...	A solid masonry building; 1400 A.D.	Not in use; no custody known of.	In ruins ...	......	Ditto	None.
Gateway of the Old Fort of Thanesar	Solid masonry building; a good specimen of Muhammadan architecture; 1400 A.D.	Partly inhabited ...	In ruins; part of the remains are tolerably perfect.	......	Ditto	None.
Mosque at Sadowra, 25 miles north-east of Umballa.	Solid masonry; date 1400 A.D. ...	Not in use ...	In ruins ...	......	Ditto	None.
Old Muhammadan House at Buria, 3 miles from Jagadri.	A curious masonry house with colored decorations inside; built by Shah Jahan 1630 A.D.	No custody ...	In ruins ...	......	Ditto	None.

SIMLA DISTRICT.

In the official list some 3 buildings are described.

Dhara Mandal at Pinjor, a Temple standing in water.	Very ancient; built of blue stone ...	Not known ...	In order ...	Impossible ...	None ...	None.

HILL STATES.

No official list.

Hill Temples ...	Many very picturesque and curious wooden deotas or Hindu temples worthy of photography, description, and preservation.	......	......	......	......	......

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
LUDHIANA DISTRICT. *In the official list some 45 buildings are described.*						
Mosque and Tomb at Ludhiana Khas	A plastered brick building with interior colored decoration, supposed to have been built in the time of Alamgir by Shaikh Muhammad Sharif, afterwards buried there.	Used for worship; no information as to custody.	Good .	Unnecessary	None ...	None.
Makbara Shah Diwan, a Tomb 1 mile to the west of the Town of Teharah.	A plastered brick building said to have been erected in the time of Akbar.	None known of a grant of 100 bighas of land said to have been made over by Government for its maintenance.	Ruins .	......	None ...	None.
JULLUNDUR DISTRICT *In the official list some 24 buildings are described*						
Masjid Shaikh Darwaish, a Tomb and Mosque in Basti Shaikh.	A brick building built by Shaikh Darwaish, who came from Kabul in 1026 A. H., a Pathan structure.	Used as a mosque, no information as to custody.	In tolerable order, but if not repaired regularly will soon give way.	... .	None ...	None.
Serai, or Travellers' Rest-house, in Nurmahal.	A brick building celebrated for its beautifully carved gate. Nur Jahan, wife of Jahangir, built this serai in 1041 A. H. It is decorated with color and carvings.	......	The Principal Gateway is being repaired	......	Photographs and drawings prepared in my Office.—*H. H. C.*, 8-7-82.	
Garden and two Tombs at Hadirawalah, close to Nakodar.	Brick buildings are used as a school, are decorated with carvings and paintings built in Jahangir's reign	No information as to custody	. . .	......	None ...	None.
Dakburi Serai, 8 miles from Nakodar	A brick building of Shah Jahan's time.	Not used; no information as to custody	Going to ruin ...	......	None ...	None.
KANGRA DISTRICT *In the official list some 169 buildings are described.*						
Temple at Talka Bhalair Jowala Mukhi	A very famous temple, to which numbers of pilgrims resort.	Not stated	... ..	......	None ...	None.
Nandekaisa Temple in the village of Jadranghal, Talka, Kangra.	Very old and famous shrine .	Ditto ..	. . .	......	None ...	None.
Kanja Mahadeo Temple in the village of Kaneara, 7 miles from Dharmsala.	Temple dedicated to Shibji in the centre of a thick wood.	Ditto ...	......	......	None ...	None.
Fort Kangra	An old and famous fort ..	......	......	......	......	......

Hindu Temples and Tanks in Kangra.	Famous for bathing and workshop...	Not stated ...	......	Ditto ...	None ...	None.
Temple at Baijnath ...	Very ancient building ...	Ditto ..	......	Ditto ...	None ...	None.
Bankhandi Thakur ...	Temple in the village of Phatran; very fine idol.	Ditto ...	......	Ditto ...	None ...	None.
Hurtumba Dabi ...	Temple in the village of Gindri; very ancient.	Ditto ...	......	Ditto ...	None ...	None.
Rugnathji ...	Temple in the village of Manny Karan; a very famous temple.	Ditto ...	......	Ditto ...	None ...	None.
Targag Narain ...	Temple in the village of Dear; very ancient.	Ditto ...	......	Ditto ...	None ...	None.

AMRITSAR DISTRICT.

In the official list some 19 buildings are described.

Sikh Temple and sacred Tank called Darbar Sahib in the Town of Amritsar.	A modern building (1762 A.D.) of marble with a copper gilt dome, sometimes called the Golden Temple; its walls are adorned with inlaid devices of figures and flowers.	Used by the Sikh priests	......	...	Several photographers have taken views.	*Plans and detailed drawings are being prepared in my office.—H. H. C., 8-7-82.*
Sikh Temple called Akal Bunga at Amritsar.	A plastered brick building, with colored decorations and the upper storey covered with copper gilt sheets; date 1806 A.D.	In religious use ...	......	*Kept in repair by the Sikhs.*	Several photographs exist.	*Ditto.*
Garden and Tomb called Baba Atal in Amritsar.	A brick and white stone building with colored decorations and gilt roofs; a lofty tower is built over the tomb.	Religious institution ...	......	...	Has been photographed.	*Plans and detailed drawings are being prepared in my office.—H. H. C., 8-7-82.*
Hindu Temple beyond the Lohgarh Gate at Amritsar; date 1750.	A brick building situated on the Durgiana Tank; has colored decorations.	Used by travellers ...	......	Ditto	None ...	None.
Old Imperial Serais built on the Delhi and Lahore road by the Emperor Jahangir about 1754 A.D.	Three brick buildings having colored decorations and encaustic tiles converted into villages.	Appear worthy of custody.	In ruins ...	Ditto	None ...	None.

LAHORE DISTRICT.

In the official list some 95 buildings are described.

Chauburgi or Gateway, 1¼ miles from Lahore on the Mooltan road.	This is a gateway leading to a garden which has been destroyed. The gate was built by Zeban Nisan, daughter of Alamgir, in 1641. It is of brick, decorated with encaustic tiles.	Appears worthy of custody.	*Under repair* ...	......	......	*Plans and detailed drawings in my office.—H. H. C., 8-7-82.*

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
		LAHORE DISTRICT—*continued.*				
Tomb of Ranjit Singh outside the Roshnai Gateway, Lahore.	A brick and marble building (1841) with paintings and sculptures. Government bears the expenses incurred in repairs.	In custody ...	......	Possibly worthy of restoration.	Has been photographed.	None.
Masjid Wazir Khan, near the Kotwali, Lahore.	A handsome brick building with coloured tiles, built in the reign of Shah Jahan.	*Used by Muhammadans; repairs urgent.*	Bad ...	*Great damage done by the natives who use the mosque.*	Ditto	*Detailed drawings in my office.—H.H.C., 8-7-82.*
Badshahi Masjid near the Fort at Lahore.	A handsome mosque, built by Alamgir, is partly painted and sculptured.	Used by Muhammadans; no information as to custody.	......	Ditto ...	Ditto	None.
Fort at Lahore ...	Commenced by Mahmud of Ghazni, finished by Shah Jahan in 1562; has some handsome buildings, and should be kept in a constant state of restoration.	In Government custody	*Repairs about to commence.*	......	Ditto	*Plans and drawings in my office.—H.H.C., 8-7-82.*
Tomb of Jahangir at Shahdara, 3 miles from Lahore	A marble and granite building, with sculptures and paintings, built by Shah Jahan 1628.	Used as resting-place for travellers; no information as to custody.	*Repairs have commenced*	......	Ditto	*Detailed drawings in my office.—H.H.C., 8-7-82.*
Shalimar Gardens, 6 miles from Lahore.	Built by Shah Jahan in imitation of the great gardens in Kashmir; is kept up by Government at an annual cost of Rs. 2,000.	Good ...	*Repairs about to commence.*	......	Ditto	*Detailed drawings in my office—H.H.C., 8-7-82.*
Tomb at Mian Mir, in the native village.	Built by Dara Shah in the reign of Alamgir; sculptured and highly painted.	Custody seems desirable	......	Information required	None ...	None.
		GUJRANWALA DISTRICT.				
		In the official list some 15 buildings are described.				
Hiran Minar, 3 miles west of Shekhupura, Tahsil Hafizabad.	A tank, summer-house and tower building in 1650 A.D. by the eldest son of Jahangir; the tank is very large, and the Baradari of good architecture.	Custody seems desirable	......	No information required.	Has been photographed by Major Mercer.	None.
		RAWALPINDI DISTRICT.				
		In the official list some 8 buildings, &c., are described.				
Manikyala Tope ...	A Buddhist Tope which has been fully described by Cunningham.	Is certainly worthy of being guarded.	In ruins ...	*Should be repaired*	Has been photographed.	See Cunningham.
Old Mound at Shah-ki-deri	Old Buddhist remains described by Cunningham.	Is worthy of being guarded.	In ruins ...	Ditto ...	None ...	Ditto.

HAZARA DISTRICT.						
In the official list some 6 objects of interest are described.						
Small Domed Cos Minar at Bat, 1½ miles from Mangal.	Supposed to have been erected by the Emperor Jahangir on the Imperial road to Kashmir; he halted at Mangal.	Apparently none ...	Falling into ruins ...	......	None known of ...	Not known of.
MULTAN DISTRICT.						
In the official list some 13 objects of interest are described.						
Shrine of Muhammad Yusaf, called Shah Gardez, in Mooltan, near the Bohar Gate.	A brick building covered with colored encaustic tiles; 650 years old.	A place of pilgrimage: custody desirable.	Repairs are necessary.	......	Has been photographed.	None known of.
Hindu Temple called Narsingpuri in Multan in the old Fort.	A brick building with paintings ...	Custody desirable ...		......	Ditto	None.
Shrine called Hazrat Shaikh Musa Pak in Multan.	A brick building of Aurangzib's time decorated with paintings.	Ditto ...		......	None ...	None.
A Domed Octagonal Monument, called Rukan-ud-din Alim, in the old Fort, Multan.	A brick building of Toghlak: about 550 years old; decorated with paintings.	A place of pilgrims; custody desirable.		......	Has been photographed. ...	None.
Shrine called Shah Shams Tabrez, about half a mile outside the north-east corner of Multan.	A brick masonry building with paintings and bright encaustic tiles: 192 years old. Shams Tabrez was flayed alive on this spot as a martyr.	A place of Muhammadan pilgrimage; custody desirable.		......	Ditto	None.
Temple, Shrine and Tank at Suraj Kund, 4 miles to the south of Multan.	Of masonry, with paintings and encaustic tile-work.	A fair held twice a year, largely attended by Hindus; custody desirable.		......	None ...	None.
MONTGOMERY DISTRICT.						
In official list some 4 buildings are described.						
Tomb of Bawa Farid at Pakpattan, 27 miles from Montgomery.	A brick building with inlaid marble floor; about 630 years old; a renowned shrine.	Visited by pilgrims: mode of custody unknown.	In perfect preservation	Unnecessary ...	None ...	None.
JHANG DISTRICT.						
In the official return these are the only two buildings described.						
Mosque at Chiniot, half a mile from Tahsil Chiniot, on the Grand Trunk Road.	Built of red and grey stone, the floor paved with mosaic of black and white marble, the tomb of white marble; there are paintings on the walls; date about 220 years old.	Held in reverence by Hindus and Muhammadans; a school is held in the building.	Fair ...	......	None ...	None.
Tomb of Hazrat Shah, half a mile from Tahsil Chiniot.	A white and black marble building; the outer walls are painted; the interior is decorated with gilding; the tomb of a Fakir, Hazrat Shah Burhan, built in Shah Jahan's time.	A fair held yearly; custody desirable.	Fair ...	......	None ...	None.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings	General character.	Custody.	Preservation	Restoration	Photographs.	Drawings or plans.
MUZAFFARGARH DISTRICT						
In the official list these are the only two buildings described						
Tomb of Nawab Tahar Khan at Sitpur on the Chenab, 60 miles from Muzaffargarh.	A brick building with encaustic tiles in green, black yellow and blue built in 1670 A.D by Nawab Sultan Muhammad	Not in use, custody desirable	In good preservation, was repaired by the civil authorities in 1867	......	Has been photographed.	None.
Tomb of Abdul Wahab at Dara Din Panah, 45 miles north west of Muzaffargarh.	A brick building with colored decorations, about 350 years old	Used for worship, custody desirable	A rent free holding of 48 bighas is attached to the shrine the income is said to amount to Rs. 2000, but is represented as being insufficient to feed the pilgrims has lately been repaired by the priests	......	Ditto	None.
DERA GHAZI KHAN DISTRICT						
In the official list some 4 buildings, &c., are described.						
Nothing very important						
DERA ISMAIL KHAN DISTRICT						
In the official list some 9 buildings are noticed						
Fort at Umarkot near Khypur ...	Built of masonry supposed to be very ancient, Hindu or Buddhist		In ruins	...	None ...	None.
BANNU DISTRICT						
In the official list 3 only ... first ... are ... ed						
Mound at Bokri Tahsil, Mianwali .	Debris of walls in the mound were laid bare by the Indians in 1868 and several figures of Greco-Buddhist sculpture were excavated and sent to the Lahore Museum	Custody seems desirable	None	......	None ...	None.

JHELUM DISTRICT						
In the official lists 34 buildings, &c., are described						
Temple at Mallot 16 miles north west of Pind Dadan Khan	A stone building of a type [illegible] has [illegible] valuable [illegible] 2000 years [illegible]	[illegible]	[illegible]	..	Said to have been photographed	None.
Fort at Rhotas, 11 miles north west of Jhelum	An old Muhammadan fort with a fine gateway	[illegible]	[illegible]		None	None
GUJRAT DISTRICT						
In the official lists [illegible] buildings, &c., are described						
Mung 33 miles north west of Guzerat, on the banks of the Jhelum	A very old place prolific in Indo-Greek coins	[illegible]	[illegible]		None	None.
SHAHPUR DISTRICT						
In the official lists 11 buildings, &c., are described						
Mosque at Bhera	A plastered brick building [illegible] by Muhammadan [illegible] with coloured decoration [illegible] 300 years old		[illegible] has lately been restored		None	None.
PESHAWAR DISTRICT						
In the official lists 13 [illegible] of interest are mentioned						
Fortress at Ranigat on the hill above the village of Nawagram [illegible] north of the Swabi police station	General Cunningham [illegible] large number of Buddhist statues and sculptures	*[illegible]*		Reports are imperfect [illegible] should be [illegible]		None
Shahbaz Garhi near Mardan	One of Asoka's edict inscriptions 250 B.C. General Cunningham [illegible] the locality as the [illegible] of Sudatta	Custody desirable				None known of
Ruins of Buddhist city of Takht Bhai, 8 miles to the north west of Mardan	Stone ruins of [illegible] relief and sculptures, 500 B.C. to 100 A.D.	Ditto	Many sculptures removed [illegible] large number		Many sculptures have been photographed	See Cunningham and Fergusson
Ruins of Buddhist city of Jamal Garhi, 7 miles to the north of Mardan	Stone bas relief and sculptures	Ditto	Many sculptures [illegible] to the Crystal Palace and destroyed in the fire there		Sculptures have been photographed	Ditto.
Buddhist Temple and Monastery 1 mile from the village Kharkhai in Yusafzai and 3 miles from the Swat frontier	Stone ruins with bas reliefs and sculptures	Ditto			None	See Cunningham.

Punjab.

Principal Ancient and Architectural Buildings, &c.—concld.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
			PATIALA STATE.			
Sirhind	Garden and Diwan-i-Khas of Akbar's time.	......	......	......	......	......
			SIND STATE.			
			In the official list some 12 buildings are described.			
Temple of Siri Jynti Devi at Sind, near the Western Jumna Canal.	Very ancient Hindu building ...	Custody seems desirable.	Said to be good ...	......	None ...	None.
			NABHA STATE.			
			In the official return only one building noticed.			
			MALER KOTLA STATE.			
Mosque of Shah Fazl at Maler ...	About 200 years old ...	Custody desirable ...	Said to be good ...	......	None ...	None.
Tomb of Shaikh Sadr Khan at Maler.	About 500 years old ...	Ditto ...	Ditto ...	......	None ...	None.
			KALSIA STATE.			
			Nothing of importance.			
			BAHAWULPUR STATE.			
			In the official list some 64 buildings are described.			
Pattan Munnara, an old tower 7 miles north of Naushahra.	A curiously-built tower on what were the banks of the Indus; the remains of an old town lie around.	Custody probably desirable.	Ruinous condition ...	......	None ...	None.
Fort at Mow Mobarik, 6 miles west of Naushahra.	Mow fort is one of six built by Sai Sahasi II. about 600 A. D.; was taken by Shah Hassan Arghan in 1525 A.D.	A village is built on the top to be out of the way of floods.	Fair ...	......	None ...	None.
			CHAMBA STATE.			
			In the official list some 8 buildings are described.			
Hindu Temples at Chamba on the Ravi.	Stone buildings with sculptured decorations.	Used by Hindus; mode of custody unknown.	Good ...	......	Photographed ...	Mentioned by Vigne. No drawings.
Temple at Mirgola in Odapur, 3 miles from Trilonath.	Highly ornamented with carvings in wood.	Ditto	Good ...	......	Worthy of photography.	Worthy of drawing in detail.

Kashmir.

Some Principal Ancient and other Native Architectural Buildings in Kashmir.

Name of building or group of buildings	General character.	Custody.	Preservation	Restoration	Photographs	Drawings or plans
	In the office [illegible] [illegible]					
Garden at Manus Bal, 10 miles north of Srinagar	Laid out in Akbar's time 300 years ago, the [illegible]	Custody desirable			Photographed	None
Temples at Pattan 15 miles north west of Srinagar	Date from 883 to 901 A.D. [illegible] *in Kashmir* [illegible] H. H. Cole, 1869	Ditto	Plans preservation very [illegible]		Ditto	None
Temple at Bhaniyar west of Baramula and 1½ miles beyond Naushahra	An interesting Hindu temple and enclosure of stone	[illegible]	In fair order should be preserved		Ditto	None
Hindu Temple on the Takht-i-Suleman Hill, called Jyeshteswara	A solid stone building with the walls and pyramidal roof [illegible]	[illegible] Hindu [illegible]	Ditto		Ditto	Drawn. See *Ancient Buildings in Kashmir* 1869—Cole
Garden and Baradari called Chashma Shahi, on the Dal Lake near Srinagar	The tank [illegible] and [illegible] Akbar	Custody desirable	Ditto		Ditto	None
Garden and Baradari at Shalimar Bagh on the Dal Lake near Srinagar	Built by Shah Jahan in brick [illegible]	Ditto	Fair order		Ditto	None
Garden called Nishat Bagh on the Dal east of Srinagar	Built by [illegible]	Ditto	Fair order, should be [illegible]		Ditto	None
Temple at Pandrethan 3 miles south east of Srinagar	Beautiful Hindu temple in [illegible] about 913 A.D. [illegible] in water	Ditto	[illegible] should be clear [illegible] jungle and preserved	It would be possible to restore this	Ditto	See plans in Cole's *Ancient Buildings in Kashmir.*
Mosque of Shah Hamadan in Srinagar	An interesting wooden building	In use by Muhammadans	Fair		Ditto	None; plans are wanted
Jami Masjid in Srinagar	A large building with wooden pillars carved	Custody desirable	Dilapidated		Ditto	None; details would be valuable
Hindu Temple at Pampur	An interesting stone building	Ditto	Ruined	None	Not photographed	None
Avantipura Temples 15 miles north east of Srinagar, late 875 to 904 A.D.	Old [illegible] temples partly buried [illegible] good [illegible] ruin [illegible] and the most important in Kashmir	Custody wanted	Ruins should be well looked after	Impossible	Photographed	See Cunningham and Fergusson. See Cole's *Ancient Buildings in Kashmir*

Kashmir.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings	General character	Custody	Preservation	Restoration	Photographs	Drawings or plans
Temple at Marttand, 3 miles east of Islamabad	The finest example of the old Kashmiri style of architecture but in great ruin	Custody much required	Require attention	..	Photographed often	See Cunningham, Fergusson, Cole, Vigne
Vernag Garden and Spring	Built by Jahangir is a most curious place, full of sacred fish	The Hindus take care of the place but it wants some systematic custody to preserve it		.	Photographed	None
Hindu Temples at Wangat about 25 miles from Srinagar	Old buildings of stone dating from the commencement of the present century are much out of the way	Custody desirable	No preservation, but should be kept clear from ... and preserved by an enclosure		Ditto	See Cunningham and Cole

Rajputana Agency.

Some Principal Ancient and Native Architectural Buildings in the limits of the Rajputana Agency.

Name of building or group of buildings	General character	Custody	Preservation	Restoration	Photographs	Drawings or plans
Chaitya Cave at Dhummar .	About 500-600 A.D., a rock-cut temple.	Custody desirable				See Cunningham.
Chaitya Caves at Kholvi	Probably the most modern group of Buddhist caves in India	Ditto	.			
Temple at Chandravati, near Jalra Patan, Jhalawar	690 A.D. has a beautifully carved roof	Ditto	..	...	.	See Fergusson and Tod. Drawings wanted
Temple at Barolli in Central India, Kotah Agency	Erected before 750 A.D. is situated not far from the fall of the river Chambul, is now a desecrated temple.	Ditto	The ornamental masonry well worthy of preservation	..	...	See Fergusson and Tod's Rajasthan. Drawings wanted.

Rock-cut Temple at Dhummar ..	A Brahminical cutting of the 8th century	Ditto		...	.	See Cunningham.
Jaina Tower of Sri Allat at Chittore.	About 80 feet high, and adorned with sculpture from summit to base, date about 896 A D	Ditto	Ruins and being damaged by vegetation.	..	Has been photographed	
Jaina Temples on Mount Abu .	Two temples have beautiful marble carvings and details, date 1032 to 1247 A D	In use		..	Have been photographed	See Fergusson Drawings wanted
Remains of Jaina Temples at Chandravati, a few miles south of Mount Abu	About 10[illegible]2 to 1250 A D destroyed by Muhammadans in the middle of the 14th century	Has been [illegible] used as a quarry by the neighbourh[ood]		.		See Tod's *Western India.*
Mosque at Ajmir, called the Arhai din ka Jhompra.	An elaborate piece of stone sculpture, originally the building was a Hindu or Jaina Temple, converted 1211 36 A D	In custody	..	*Has been partly restored by the* [illegible] *Major Cole,* [illegible]	Has been photographed	
Daolat Bagh, Ajmir	*Built by Jehangir*	*Requires repairs survey being made*			Photographs would be valuable	See Rousselet pages 215 and 21[illegible] Worthy of drawing
Temples on the shore of the Lake at Pushkur	Numberless temples and buildings on the shore of the lake erected by Mann Singh of Jaipur, Jowahir Mull of Bhurtpur, Daulat Rao Sindhia of Marwar and Holkars family, queen Ahalya Bai, a beautiful collection of Rajputana architectural styles					
Tower of Victory in the Fort at Chittore 120 feet high	Erected by Khumbo Rana to commemorate his victory over Mahmud of Malwa in 1439 A D	Custody desirable	Requires repairs		Has been photographed	See Fergusson
Jain Temples, the Sengar Chaori Temple of Vrij &c	Ruins in Fort at Chittor	Worthy of custody	Worthy of preservation			See Rousselet, pages 191 and 194
Palace at Amber the original Capital of the Jaipur State	Date about 1592 A D the Sowai Gate of Sowai Jye Sing is a beautiful work of art	Well worthy of custody	*Requires preservation*	.	Has been photographed	See Rousselet pages 235 245 Worthy of careful drawing Drawings would be most valuable
Tomb of Rajah Buktawar at Ulwar	A modern chattrie with considerable architectural pretensions to beauty	In custody	*Requires repair*		Ditto	
Palaces in the Islands of Udaipur	The interiors decorated with marble and glass mosaics	Used by the Maharana	Being restored by the Maharana		..	See Rousselet's *India and its Native Princes* page 168.
Palace at Udaipur	A large and magnificent building used by the Maharana of Udaipur	In use	.	.		See Rousselet's *India and its Native Princes* page 160
Cenotaph of Singram Singh at Udaipur, in Mewar Agency	Singram Sing was buried here in 1733 a [illegible]ing and elegant building in stone	Custody desirable	Will be restored by the Maharana of Udaipur	..	Has been photographed.	See Rousselet and Fergusson

Rajputana Agency.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings	General character	Custody	Preservation	Restoration	Photographs.	Drawings or plans
Cenotaphs of the Maharanas of Udaipur at Ahar, Udaipur				.	Has been photographed	See Rousselet and Fergusson
Chattries of the Bhurtpur Rajahs at Goverdhun, near Bhurtpur	Very pleasing buildings of a modern type	In custody of the Rajah's people	....	....	Have been photographed	See *Buildings near Muttra and Agra* by H H Cole
Palace at Dig in the Bhurtpur Territory	A modern building (dating from 1725) of the mixed style	Used by the Rajah also by visitors	Fair	.....	Has been photographed	See Fergusson and Cole
Temple of Mira Biae at Chittore	A temple dedicated to Vishnu	Is much overgrown with trees	.	..	Ditto	See Fergusson

Central India Agency.

Some Principal Ancient and other Native Architectural Buildings in the limits of the Central India Agency.

Name of building or group of buildings.	General character	Custody	Preservation	Restoration	Photographs	Drawings or plans
Buddhist Tope at Sanchi near Bhilsa	Very ancient ruins with railing and gateways date of tope 500 B C railing 250 B C gates 37 A D	*Custody most desirable*	*Repairs have commenced the fallen gateway will be re-erected*	.....	Has been photographed See *Tree and Serpent Worship* by Fergusson	See Cunningham, Fergusson Maisey, Cole &c, also Rousselet
Remains of Jain Temple at Gyraspore, near Bhilsa in Bhopal	Beautifully carved stone columns, about 650 A D	Custody desirable	Ruins	.	Have been photographed	See Fergusson.
Temples to Vishnu and Siva at Khajuraho in the Bundelcund Agency.	Dating from 950 to 1050 A D very profuse in stone sculptures of human figures and foliation	Ditto	Ruins	..	Ditto	See Cunningham's *Archæological Reports*, Vol II, page 420 also Fergusson and Rousselet
Jaina Temples at Khajuraho 125 miles west south west from Allahabad, and 150 miles south-east of Gwalior	A deserted place but having some 30 temples of great beauty erected about the 11th century	Ditto	Ruins	..	Ditto	See Fergusson and Rousselet
Bharhut Tope ...	*Date of the rail 200 B C*		*Portions of the rail and [illegible] Calcutta Museum*			

Temple at Udaipur, near Bhilsa in Bhopal.	Dating about 1060 A D, and carved with great precision and delicacy	Custody desirable	In comparatively good condition	..	..	See Fergusson, page 457
Two Jaina Temples at Gwalior	Finished about 1093 A D covered with elaborate sculpture		*Have been cleaned and repaired*	..	Have been photographed	See Fergusson.
Teli ka Mandir at Gwalior	Is in the Fort at Gwalior a pile of ruin dating from the 10th or 11th century		*Has been repaired and cleaned*	..	Has been photographed	
Palace at Gwalior	Built by Mann Singh (1486-1516) a remarkable specimen of Hindu Palace the outer wall covered with enamelled brick		*The palace has been cleared and repaired*	*Plans and drawings in my office—H H C*	Has been photographed	
Tomb of Muhammad Ghaus, Gwalior	Erected in Akbar's reign has beautiful tracery or pierced stone work		Repairs required		Ditto	See Fergusson
Great Mosque at Mandu, Malwa	1405-30 A D	*Custody desirable*	*Repairs in progress*	*Drawings in my office—H H C*		
Palace at Duttiah, in Bundelcund	A large block of buildings of a pleasing architectural character	In use	Information wanting		Has been photographed	Drawings wanted.
Palace at Urtcha, in Bundelcund	A very picturesque combination of domes and gateways	In use	Ditto		Ditto	Ditto
Cenotaphs of the Scindiahs, Gwalior.	Quite modern	In custody	Ditto ..	..	Ditto	.
Temples, said to be Jain, at Sonaghur near Duttiah in Bundelcund	Quite modern temples	In use	Ditto		Have been photographed	See Rousselet page 322.

Central Provinces.

Some Principal Ancient and other Native Architectural Buildings in the Central Provinces.

Name of building or group of buildings	General character	Custody	Preservation	Restoration	Photographs	Drawings or plans
In the official list there are 106 buildings, &c, mentioned						
Remains of Hindu Temples and a fine Gateway in the Nimar District at Mandhata	....		Information wanting		None	

Central Provinces.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Ancient Temples in the Mahadeva Hills, Pachmarhi, Hoshangabad District.	......					
A rock-cut Temple at Tilaksundur, Hoshangabad District.	......					
Several Bathing-ghats and Hindu Temples at Sagar.	......					
Antiquities and a Pillar of Asoka at Eran, in the Sagar District.	Described by Cunningham ...	......	......	......	......	......
Ruins of Mosques, Tombs, and Buildings round the lake and Fort at Dhamoni, in the Sagar District.	......					
Remains of Jaina Temples in the Damoh District.	......					
A famous Castle and Ruins of the Palaces of the old Gond Rajahs in the Narsinghpur District.	......					
Remarkable Temple at Bhera Ghat, 9 miles from Jabalpur.	An inner shrine, surrounded by a domed circular cloister, with many sculptures.	......	......	......	......	......
Ruins of a Mahal at Garah ...	Built by Madan Sinha in 1100 A.D.					
Ruins at Karanbel near Tewar, in the Jabalpur District.	Well-known ruins, *from which stones have recently been removed by Railway contractors.*	......	......	......	......	......
A small Temple and Ruins of Palaces at Ramnagar, in the Mandla District.	There is an inscription on the temple, of which a rubbing is required.	......	......	......	......	......
Some 40 or 50 Hemarpanti Temples at Gunsur, in the Seoni District.	Very elaborate buildings in sandstone.	......	......	......	......	......
One of the ancient Gateways at Pannar, in Wardha District.	One gate recently removed to make way for modern improvement.	......	......	......	......	......
Two very fine Temples at Parseoni, in the Nagpur District.	......					
Temples and Remains of all kinds of Buildings at Ramtek, in the Nagpur District.	......					
A fine Temple of Mahadeva at Jangir, in the Balaghat District.	A very complete building of the fourteenth century, with minute and quaint sculptures.					
The district of Balaghat is said to contain handsome Buddhist Temples, the exact localities of many of which are not known. At Bhimlat there is a Lat lying on the ground.	......					

Temple of Mahadeva at Pali, in the Bilaspur District	Said to be the finest temple in the district		...	...	...	......
Countless number of Tanks and Temples at Ratnapur, in the Bilaspur District						
A Temple of Buramdeva, in the Bilaspur District	Has an inscription, said to be dated 103 A D					
Ruins of very old and interesting Temples at Malhar, in the Bilaspur District						
Celebrated Temple of Rajiva Lochan at Rajim	An inscription is dated 759 A D see *Asiatic Researches* V I XV					
Architectural remains at Bhandak, in the Chanda District	These are of great age and interest among them some cave temples &c					
An ancient and beautiful group of Temples and Monastery at Markundi in the Chanda District						
Famous old Temple of Ramchandra at Bhadrachallam in the Upper Godavery District	Supported by an annual endowment of R 13 000 from the Nizam's Government					

Haiderabad.

Some Principal Ancient and other Native Architectural Buildings in the Nizam's Territory, Haiderabad.

Name of building or group of buildings	General character	Custody	Preservation	Restoration	Photographs	Drawings or plans
Dravidian Temple, the Kailas at Ellora	One of the most singular and interesting architectural monuments in India cut in the rock, date 750-950 A.D	Requires guarding	Has been damaged by Muhammadans			See Daniell's *View of Hindustan*
Caves at Ellora, Aurangabad District	500-800 A D	Custody desirable	...	..		See Fergusson and Daniell
Chaitya Caves at Ellora, Aurangabad District	Rock cut temple about 600 A D	Ditto	....	.. ...	Has been photographed	See Fergusson
Chaitya Caves at Ajanta	Rock-cut temple with colored frescoes and handsome sculptures.	*Doors have been fitted to the caves by the Nizam's Government*	.. ..	......	Have been photographed.	See Gill, Fergusson Burgess and Griffiths Some of the paintings have been copied
Jaina Temple at Amwah, near Ajanta	Beautiful carved stone pillars	None	Ruins	. ...	Photographed by Major Gill	

Haiderabad.

Principal Ancient and Architectural Buildings, &c.—continued.

Name of building or group of buildings.	General character	Custody	Preservation	Restoration	Photographs	Drawings or plan.
Chalukyan Temple at Buchropulli	A temple near Haiderabad, called by Fergusson the most simple form of a Chalukyan temple.	Custody desirable	Ruins ..		Has been photographed	
Four Kirti Stambhas or stone Gateways in Worangul	Built about 1163 A.D by Pratapa Rudra	Apparently in good condition	.	.	Have been photographed	
Temple at Hammoncondah in the Worangul District	Erected in 1163 A D an elaborate example of Chalukyan architecture	Custody desirable			Has been photographed	
Mosque at Kalburgah	1347-1435, a remarkable Pathan building, the whole of the area being covered in	*Repairs are about to be undertaken by the Nizam's Government*	.	.	Ditto	See Fergusson.
Tombs of the Berid Shahi Dynasty at Bidar.	1492-1609 A D interesting buildings not described or drawn by any one		.			
Temples said to be Jain at Muktagiri in Berar near Gawalghur	All of the modern domed style		..			
Temple at Maikur, Buldana District	A large temple with Jain columns					
Berar Hemarpanti Temple at Lonar, Maikur Buldana District Berar (The term *hemarpanti* is derived by tradition from a sorcerer Hemarpant who used demons to build temples in one night)	Finest carved Hindu building in Berar covered with sculptures see Mr Lyall's account in the *Berar Gazetteer* page 13[illegible]					
Group of Jain Temples at Mukhtigiri near Ilichpur	A beautiful group of buildings near waterfall					

Some Principal Ancient and other Native Architectural Buildings in the Maharajah's territory, Maisur.

Name of building or group of buildings	General character	Custody	Preservation	Restoration	Photographs	Drawings or plans.
Jain Statue at Yannur	This image is 35 feet high	Information wanting			Has been photographed	..
Jain Statue at Sravana, Belgual, near Seringapatam.	This statue is 70 feet high Wellington went to see it at the time of the Siege of Seringapatam, 1799.	Ditto			..	..

Jaina Bastis at Stavana, Belgula, near Seringapatam.	There are 16 of these temples, which are more or less of ornamental masonry.	None known; well worth looking after.	Information wanting ...	......	Has been photographed.	None.
Temple at Somnathpur ...	Built by Vinaditya Bellala in 1043 A.D.; very elaborate shrine, with carvings in stone.	Said to be in charge of the Assistant Commissioner, Maisur District.	*Were repaired and put in order by Colonel Sankey in 1876.* (for these three temples)	......	Ditto	See Fergusson.
Great Temple at Hullabid; commenced about 1224 A.D.	A double Chalukyan temple of great beauty and elaboration.	Said to be in charge of Amildar of Belur.		......	Ditto	Ditto.
Temple at Belur in Maisur, near Hullabid.	A Chalukyan temple, with wonderfully elaborate sculptures; built in 1114 A.D.	Ditto		......	Ditto	......
Chalukyan Temple, called Kait Isvara, at Hullabid in Maisur; erected in the 12th century.	Covered with sculptures of the best class of Indian art.	Ditto	......	......	......	......
Colossal Jain Statue at Karkala ...	This image is 41 feet 5 inches high, date 1432 A.D.	No information ...	......	......	......	......

Burma.

Some Principal Ancient and other Native Architectural Buildings in Burma.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
		No official list yet furnished. [See Fergusson's *Indian Architecture.*]				
Pagoda at Thatun, about 40 miles north of Martaban.	The ruins at Thatun have been described by St. Andrew St. John, and are very extensive: the principal pagoda is adorned with the most elaborate sculptures: date probably before sixth century.					
Ruins and remains at Prome ...	Prome was the religious capital of the Buddhists in Burma up to 107 A.D., and its ruins require investigation.					

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody	Preservation.	Restoration.	Photographs.	Drawings or plans.
Ruins of Pagan ...	These are very extensive, and Colonel Yule estimates that the remains of 800 to 1000 temples may be traced The temple of Gandapalen 1160 A D, is rich and beautiful in detail; the buildings are always of brick covered with stucco		..	......	. ...	**Burma.**
Circular Dagobas ...	The Kongmadu Dagoba is not far from Mengun and dates from 1650 A D In form it resembles the Sanchi tope, having precisely the same features, made however of brick and plaster instead of stone and elaborate gateways the Shoemadu Dagoba at Pegu is more polygonal than circular, and is as high as St Paul's	..	....	.	. ....	See Colonel Yule's *Mission to Ava*
Burmese Monasteries ...	Are all of wood, and most of them many storeyed, like the temples in Nepal (see Fergusson).	.. ...	..	......	. ..	See Colonel Symes' *Embassy to Ava.*
Ancient Remains in Kabul.						**Kabul.**
Jellalabad Topes .	A number of some 40 topes, dating from the commencement of the Christian era to 700 A.D.	..	Some lately excavated during the Afghan Campaign, and coins discovered by Mr Simpson	...	....	
Ali Masjid .	A number of remains were examined here in January 1879 by Mr Beglar.					
Some Ancient Buildings in Nipal						**Nipal.**
Buddhist Temple of Swayambunath, near Khatmandu.	Curious pile of building the Chaitya is of an irregular form, with a very exaggerated form of "tee"	Used for worship	. ...	......	......	See drawings in the *Hodgson Collection.*
Hindu Temples to Mahadeo and Krishna at Patan	Curious buildings, worthy of preservation	. .	...	......	Have been photographed.	Ditto.
Hindu Bhowani Temple at Bhatgano.	It is five storeys in height, and very Chinese in character.			...	Ditto	Ditto.
Ancient Buildings in Assam.						**Assam.**
	Nothing of any importance.					

Madras Presidency.

Some Principal Ancient and other Native Architectural Buildings in the Madras Presidency.

Name of building or group of buildings.	General character	Custody	Preservation.	Restoration	Photographs	Drawings or plans.
			Some 92 remains are noted in an official list furnished in 1870			
Buddhist Tope at Amaravati, in the Kistna District.	Remains of a Dagoba and Railing, about 400 and 500 A.D	*Custody desirable*	*Under investigation*		See *Tree and Serpent Worship*, by Fergusson	See *Tree and Serpent Worship*, by Fergusson.
The Seven Pagodas at Mahavalipuram near Madras, in Chingleput	Temples of Dravidian architecture about the 6th century, cut in the rock	Custody desirable (Permanent watcher suggested in 1870)	*Preservation has been commenced and a good deal remains to be done*	..	Photographed by Dr Hunter Captain Lyon	See Fergusson, Colonel Mackenzie.
Dravidian Temple at Tiruvalur, in Chingleput 30 miles west of Madras	A number of temples and shrines enclosed in a court 940 feet by 701 feet			..	..	See Fergusson and Ram Raz's *Hindu Architecture.*
Dravidian Temple at Conjeveram in Chingleput	Groups of temples as picturesque and good as any elsewhere in the Madras Presidency			..		
Temple at Perur in Coimbatore	Has a fine porch date about 1750 A D with handsome compound pillars			..	Has been photographed	See Fergusson
Two Gopuras of a deserted Temple at Tarputry on the banks of the river Pennair District Bellary	Covered with the most elaborate sculpture	..	..	..	Have been photographed	See Fergusson Details would be valuable
Temple of Vitoba at Vijayanagar on the Tongabhadra, Bellary District	A remarkable ruin of the Dravidian style erected 1529-42 A D carved in granite		*About to be repaired*	..	Has been photographed	Details would be valuable
Temple at Vellore, North Arcot	A fine porch date about 1350 A D in the Vellore Fort was occupied as a store	..	*Has been restored and cleared*		..	See Fergusson.
Rajah Mahal, or Rajah's Palace of Chendragiri, in North Arcot	Chendragiri is a deserted fortified city there are several interesting ruins in the fort, among them the Rajah's palace	..	In 1877 the sum of Rs 2,000 was provided for repairs	..	None known	None known.
Delhi Darwaza at Arcot	Is a spacious and massive gateway surmounted by a room said to have been used by Clive at the time of the defence of Arcot		In 1877 a small estimate was framed for its repair	..	..	..
Temple at Chillambaram, in South Arcot	A large enclosure of shrines and temple dating from 10th to the 17th centuries	..	Preservation desirable		Has been photographed	See Fergusson Details would be valuable

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Dravidian Pagoda at Tanjore ...	Called the Great Pagoda; date about the 14th century.	......	In charge of the Princess of Tanjore.	......	Has been photographed.	See Fergusson. Details would be valuable.
Dravidian Temple of Soubramanya, Tanjore.	Date about 15th century; covered with elaborate sculpture.	......	Ditto	......	Ditto	Details would be valuable.
Goparam or Porch at Combaconum in the Tanjore District.	A richly ornamented piece of Dravidian architecture.	......	......	......	Ditto	Details wanted.
Dravidian Temple at Srirangam, near Trichinopoly.	A very large enclosure of temples: a modern cluster of buildings built within the limits, of the 18th century.	Used for sacred purposes; a great resort of pilgrims.	*Projects for repairs in hand.*	......	Frequently photographed.	......
Great Temple at Madura ...	......	In use ...	Ditto	......	......	Drawings have been prepared in my Office.—*H. H. C.*, 8-7-82.
Trimal Nayakka's Palace at Madura	Dating from 1623-45 A.D. ...	......	*Repairs in progress. The Palace is being converted into district offices.*	......	Has been photographed.	See Fergusson. Details wanted. Mr Chisholm at Madras has drawings.
Dravidian Temple of Ramisseram in the Island of Paumben in Madura.	Has some beautiful corridors; about 1550 A.D.	......	*Has been much disfigured by coatings of paint. Project for repairs in hand.*	......	......	Drawings in my Office.—*H. H. C.*, 8-7-82.
Pagoda at Sampali, in the Cuddapah District.	A small ruined pagoda with some fine stone carvings and fresco paintings.	......	......	......	......	......
Temple at Tinnevelly ...	An enclosure 508 feet by 756 feet ...	......	Preservation desirable	......	......	See Fergusson.

Bombay Presidency.

Some Principal Ancient and other Native Architectural Buildings in the Bombay Presidency.

Name of building or group of buildings	General character	Custody	Preservation.	Restoration.	Photographs.	Drawings or plans.
In an official list furnished by Mr Burgess in 1875 some 720 places of interest are enumerated.						
Cave at Elephanta, Bombay	Dates from the middle of the eighth century, curious Hindu sculptures	Systematic custody &c desirable in charge of Executive Engineer, Bombay Defences	*Stone work has been recently cleaned.*	..	Has been photographed.	See Burgess.
Chaitya at Kenheri on the Island of Salsette, Bombay	A rock cut Buddhist temple, about 600 A D	Custody desirable	Fair			..
Chaitya Cave at Nasik, Bombay	A rock cut Buddhist temple about 129 B C, with sculpture and capitals	Ditto	Fair		Has been photographed	See Fergusson.
Temple called Ambernath, near Kalian, Bombay	Dating about 860 A D, casts of the sculptures have been made and sent home though small it is richly carved	*Custody desirable Repairs needed; project under discussion*			None ..	See Daniell Drawings would be valuable
Saiva Temple at Poona Bombay	A Hindu rock-cut temple of plain design	Ditto				See Daniell.
Chaitya Cave at Karli in the Bhore Ghat	A handsomely rock cut temple, 78 B C	*Repairs in hand*			Has been photographed	See Fergusson.
Chaitya Cave at Bedsa 11 miles from Karli, in the Bhore Ghat	A rock cut temple with sculptured capitals	Ditto	In charge of Executive Engineer, Poona District		Ditto	See Burgess and Fergusson.
Chaitya Cave at Bhaja, in the Bhore Ghat.	A cave temple dating before the Christian era, carved out of the rock, no sculpture	Custody desirable		...	Ditto	Ditto.
Jama Masjid at Byapur, in the Kaladgi Collectorate.	1557 79 A D.	*Repairs in hand, the town about to be made the head-quarters of the Kaladgi District*		....	Ditto	See Fergusson and A Cumming; also Hope's *Architecture of Byapur.*
Tomb of Ibrahim at Byapur, in Kaladgi Collectorate.	1579 1626 A D; a very elaborate square building	..	...	..	Ditto	

Bombay Presidency.

Principal Ancient and Architectural Buildings, &c—contd.

Name of building or group of buildings.	General character	Custody	Preservation	Restoration	Photographs.	Drawings or plans.
Tomb of Muhammad at Byapur, in the Kaladgi Collectorate	1626-60 A D, remarkable for simple grandeur and constructive boldness	Will be repaired			Has been photographed.	See Hope's *Byapur*.
Jama Musjid at Ahmedabad, Bombay	About 1411 A D, a fine building Saracenic in style		Repairs have been [illegible] on since 1869 Further work is under consideration		Ditto	See Hope's *Architecture of Ahmedabad*, also Fergusson
Queen's Mosque at Mirzapur, Ahmedabad Collectorate	Very fine building, Saracenic in style				Ditto	
Tombs and Mosque at Sirkhej about 5 miles from Ahmedabad	1445-51 A D, fine buildings, Saracenic in style				Ditto	
Tomb of Kutub-ul-Alam, Butwa, near Ahmedabad.	Built in 1460 A D, Saracenic in style				Ditto	
Tomb of Syad Osman, Ahmedabad	Built about 1460 A D by Mahmud Beguna, Saracenic in style				Ditto	
Tomb of Mahmud Begurra, near Khana, Ahmedabad.	About 1434 A D, Saracenic in style				Ditto	
Mosque of Mohafiz Khan, Ahmedabad	Saracenic in style				Ditto	
The Rani Sipri Mosque Ahmedabad	Ditto				Ditto	
Desecrated Mosque in the palace at Ahmedabad (Bhuddur)	Beautiful specimen of window tracery in this building			......		..
Jama Masjid at Cambay Bombay ...	Erected in 1325 A D	Information wanted	Much out of repair	......		
Jaina Temples at Moodbidri in Kanara, Bombay	The exteriors are very wooden in construction although in stone the interior columns carved in the most elaborate manner	Custody desirable		......	Has been photographed	See Hope's *Architecture of Dharwar and Mysore*
Jaina Stambha or Pillar at Gurusankerry in Kanara, Bombay	A handsome carved stone pillar		Apparently fair	...	Ditto	.
Jaina Temples at Girnar, near Puttan Somnath, Guzerat	Amongst these is the famous Somnath temple	.		... ...		See Burgess.

Jaina Temples at the sacred city of Sutrunjya, near Palitana in Guzerat, Bombay.	Numbers of temples and shrines; some as early as the eleventh century and as late as the present century.	A few priests sleep in the temples and keep the place clean.	......	......	None ...	Ditto.
Jama Masjid at Champanir in Guzerat.	Built by Muhammad Shah in 1485 A.D.; said to be very tasteful decoration.	Is not used ...	Has been injured in many places.	......	None ...	None.
Tomb of the Nawab of Junaghur, in Guzerat, Bombay.	A modern building ...	......	......	......	Has been photographed.	
Jama Masjid at Broach ...	Probably built before Ahmad Shah; built of stone with domes, and is a fine specimen of an early mosque-constructed art of the materials of overthrown Hindu temples.	Used as a travellers' quarter by Muhammadan mendicants.	Is falling into a dilapidated condition. Repairs wanted.	......	None ...	See Mr. Hope's book on *Surat & Broach*.
Brahminical Temple of Papanatha at Purudkul or Pattadkal, in Dharwar, Bombay.	Date about 500 A.D.; a much sculptured stone building.	None known ...	A ruin ...	......	Has been photographed.	See Burgess.
Dravidian Temple at Pattadkal, in Dharwar, Bombay.	Date eighth or ninth century; a rock-cut temple.	Requires custody badly	Requires preservation	......	......	See Fergusson and Burgess.
Brahminical rock-cut Temples at Badami, in Dharwar, Bombay.	There are three caves, interesting for their architectural details and sculptures; 575-700 A.D.	......	......	......	Have been photographed.	See Burgess.
Deepdan or Stone Lamp Post at Dharwar, Bombay.	An elegant stone column ...	......	......	......	Has been photographed.	......
Tomb near the Mosque of Mirza Shami at Surat.	In the style of the later Muhammadan tombs at Ahmedabad; windows of perforated stone and the domed interior of rare beauty.	Is in a dilapidated and filthy state.	......	......	None ...	None.
Mosque at Dabhole in the Ratnagiri Zilla.	Worthy of repair and preservation...	Custody desirable ...	In charge of Executive Engineer, Ratnagiri.	......	......	......
The Munshis' Mosque at Randel, Surat.	Apparently a small Jain temple converted into a mosque; curious for its carved wooden pillars.	No information ...	......	......	None ...	None.
Buddhist Cave Temples at Kararh, 30 miles south of Satara.	No information ...	......	......	......	......	......
Also Jama Masjid ...	Built 1509 A.D.; both mosques and minarets are decorated with carvings *covered with plaster*.	No information ...	......	......	None ...	None.

Bombay Presidency.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody	Preservation.	Restoration.	Photographs.	Drawings or plans.
Mosque and Tombs at Tatta in Sind, 1572-1640, Bombay.	The tomb of Navab Amir Khan, 1640 is of brick, ornamented with beautiful colored tiles	In custody of the Muhammadans at Tatta.		*Restoration recommended in 1865 by Sir Bartle Frere at a cost of Rs 5 000 this was actually carried out in 1867*	Has been photographed	Details would be valuable
Lal Shah Baz, a Masjid in the south east quarter of Sehwan in the Karachi District.	Built of first rate brick profusely decorated with colored tiles, built about 1340 A D	Occupied by Sayyids and considered very sacred	No information		None	None.
Kwaja Kizr Jind Pir at Rohri on an Island opposite Sakkar	Date 952 A D covered with tiles of all colors and patterns	No custody a guard and much wanted	Preservation necessary	Impossible	None	None

I

Extract from the Proceedings of the Government of India in the Home, Revenue and Agricultural Department (Surveys), No. 30-42, dated Fort William, the 2nd February 1881.

OBSERVATIONS.—Her Majesty's Secretary of State having sanctioned the appointment of a Curator of Ancient Monuments, whose duties will be to superintend, under the Supreme Government, the conservation of the most celebrated and important examples of national archæology and architecture throughout India, the Governor General in Council is pleased to appoint Captain H. H. Cole, R.E., to be Curator, and to direct him, in communication with the Local Governments and Administrations, to inspect the principal monuments throughout India, the historical and archæological value of many of which has been brought to notice by General Cunningham and the other officers engaged in the Archæological Survey of India, in order to frame a scheme for their protection and conservation.

2. The national buildings of the Indian Empire are so numerous and so valuable, as well from an archæological as from an artistic point of view, that the Governor General in Council feels confident of meeting with ready co-operation from all the Provincial Governments, and desires that all possible assistance may be afforded to the officer to whom the organisation of the new department is confided.

3. The appointment of Captain Cole was notified in the *Gazette of India* of the 29th ultimo.

K

Extract from a letter from the Secretary to the Government of India, Home Department, to Local Governments and Administrations, dated the 12th August 1881.

* * * * *

2. The main object of Captain Cole's appointment is to give the Government of India and Local Governments the advantage of professional advice in questions concerning the restoration and conservation of ancient monuments throughout India. All schemes for such works should, therefore, be considered by Local Governments in consultation with Captain Cole, but he will not be directly concerned with the estimates for the work, which should be prepared by the officers of the Local Governments.

3. Should the estimated cost of any work be more than the Provincial Services can afford, the Local Government will be at liberty to apply for any additional sum required to the Government of India, by whom a certain sum will be set apart yearly for such purposes.

4. On the work being approved by the Government of India, or in the event of the Local Government being able to carry it out without assistance from that authority, it will rest with the Local Government to carry it out; but Captain Cole should be referred to from time to time as occasion may require during the execution of the work, and any suggestions of his should receive full consideration.

L

Letter from Captain H. H. Cole, R.E., Curator of Ancient Monuments in India, No. 512, dated Simla, the 10th November 1881, to the Secretary to the Government of India, Home Department.

I have the honour to submit the following recommendations for dealing to the best advantage with the various architectural illustrations in course of preparation in my Department.

2. Fourteen years ago, when the subject of Indian architecture was exciting a great and general interest at the Paris Exhibition of 1867,* I addressed a note on the collection of information about the architecture of India (dated Naini Tal, June 1867) to the Secretary of the Science and Art Department.

In paragraph 2 of that note I thus drew attention to the importance of reviving in this country a knowledge of its national art:—

"(2) Apart from the value of representing Indian architecture for study in England, there would be a good opportunity for representing at various museums in India a history of Native architecture. The education of natives whose modern art is daily becoming more and more corrupted, and all originality and identity being lost, is a matter worthy of serious consideration."

3. I again drew attention to this subject in my report for the year 1869-70 in which I submitted a brief narrative of my surveys in Kashmir, the North-Western Provinces, and of the casting operations at Sanchi in Central India. In the appendix of that report, quoted as follows, reference is made to the illustrations prepared in Kashmir and the neighbourhood of Agra, at Fatehpur Sikri, Bindrabun and Dig, which were published by order of the Secretary of State at the India Office:—

"1. The study of Indian Art and Architecture is more important than would appear at first sight, and I append here a short note on the principal aims which I endeavour to keep in view in collecting illustrations.

"As bearing on our knowledge of India the study is important to those who wish to know who the people of this great country are, and what state they existed in before the Muhammadan invasion.

"The faith, state of civilisation, and prosperity of the natives who occupied any particular period or locality may be found engraved on the architecture of the country, and these stone records are all the more precious when it is considered that there are few written annals that can be trusted.

"2. To English architects the study offers a means of elucidating the true position of architecture in England, by widening the base of observation and enabling students to realise the definition of architecture as an 'art,' and not as a system of copying.

"3. Architecture in India is a living art, influencing not merely the forms and details of buildings, but giving birth also to nearly all those ornamental details which render so many Indian manufactures valuable as being at once ornamental and useful. The instruction, therefore, of native builders and artisans in the different styles of Indian architecture appears to be the chief remedy for preventing modern Indian buildings from lacking instinctive native merit free from efforts to copy European styles, and for rendering Indian ornamental manufactures of sufficient ornamental novelty to find a market not only in this country, but in Europe.

* The illustrated volumes published in 1866 under the auspices of the Committee of Architectural Antiquities of Western India, edited by Mr. T. C. Hope, C.S., together with the photographs of Indian buildings exhibited at Paris, brought the subject prominently forward.

"4. With special view, therefore, of making full use of such illustrations as are now being produced of Indian buildings, I venture to suggest that the photographs and drawings be freely circulated throughout India for study and reference.

"Schools of Art, Native Colleges, and Museums should, I think, exhibit them in series with vernacular notes. Municipal communities and civil authorities should possess copies of each series for reference, and I cannot but think that many appropriate forms could be selected out of which to design municipal and other buildings for native purposes.* "—(*Appendix, quoted from the Report, dated Camp Sanchi, February 1880.*)

4. The illustrations in course of elaboration in my office are of three kinds—

(*a*) Rough sketches to illustrate preliminary reports.

(*b*) Plans and drawings to illustrate recommendations for the preservation of buildings, &c.

(*c*) Plans, drawings, details, photographs in illustration of Indian architecture and art.

5. The accompanying printed catalogue of the rough drawings† prepared by my draftsmen during the last year shows how much material has been collected. Many of these drawings have already been faired out for the Lahore and Delhi projects.

Besides these, Mr. Heath, Executive Engineer for the Conservation of Ancient Buildings in the North-Western Provinces, has prepared a considerable number of excellent drawings of buildings at Agra, Bindrabun, Mahoba, Hamirpur, Jaunpur, &c.

6. As I have already pointed out in my report of 10th May 1880, these illustrations to be of value *should be reproduced in the best possible style, and published in single plates for use in schools of art throughout India, and for sale to artisans.* The best firm in the world for architectural and art works is Morel & Co. of Paris. They have published some unequalled volumes on Oriental Art, and have abundant facilities for reproducing coloured drawings by chromolithography, by etching, and by engraving on steel and copper-plate. I have no hesitation in recommending that they be entrusted with the reproduction of the drawings above mentioned; but it would be essential to find out what are the points to observe, so that the engravers, &c., may have the least difficulty in reproducing from original plans and drawings.

When I have ascertained this, the drawings can be sent from India to Paris and published without further delay.

I would suggest that authority be given for me to incur a sum not exceeding Rs. 5,000 allotted out of this year's grant for conservation in getting a selection of the drawings reproduced.

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* During my stay last year at Bindrabun, I saw in progress a Hindu house which was being built at the expense of a Lucknow banker. It is not too much to say that it was the most hideously hybrid structure I have ever seen. The capitals were Ionic, the polished marble pillars fluted, the details Hindu, Muhammadan, Gothic! And the doors and windows closed by green venetians.

† It is unnecessary to print the list here. It consists of 469 plans and details.

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Catalogue of Works of Reference bearing on Indian and Oriental Architecture, Art, and Archæology.

(*Under correction.*)

Some six months ago I procured lists of the Indian and Oriental Art Books of Reference in the Art Library of the Kensington Museum. These lists I now give, keeping those on India separate from those bearing on Oriental Art. They contain a large number of most valuable volumes, many of which are out of print and difficult to get. Edwin Parsons, 45 Brompton Road, London, and other dealers in rare books will generally ferret out a copy, if it is going; but both Messrs. Thacker, Spink & Co., in Calcutta, and Thacker & Co., Bombay, have most of the modern works, and some of the reprints of the earlier ones.

Provincial Gazetteers of the Indian Empire can be obtained at the various Government presses. Hunter's Imperial Gazetteer of India is published by Trübner & Co.

Fergusson and Taylor's Architecture at Beejapore, and Architecture in Dharwar and Mysore, can be had of John Murray, London, but the photographs are out of print.

Fergusson and Burgess' Cave Temples of India is procurable through Thacker and Co., Bombay. General Cunningham's Archæological Survey Reports are published by the Superintendent of Government Printing, Calcutta.

Dr. Burgess' Archæological Reports of Western India are published by Allen and Co., London, but can be had at Thacker and Co., Bombay. Mr. Growse's Mathura Memoir is published at the Government Press, Allahabad.

Biddulph's Tribes of the Hindu Kúsh may be had from Thacker, Spink and Co., Rajandralala Mittra's Buda Gya, Bengal Secretariat Press, and my official and illustrated Reports on the Conservation of Indian Monuments are being published by the Indian Government.

A cheap edition of Rousselet's India and its Native Princes can be had of Thacker and Co., Bombay, price Rs. 9-8-0.

The following are interesting works :—

Ujfalvy, Bourdon: De Paris à Samarkand. Hachette and Co., Paris, 1880.

Faria Souza: History of the Discovery and Conquest of India by the Portuguese; translated by Captain John Stevens, 1694.

Athanasius Nitikins: Travels in the Deccan, 1470; translated by R. M. Major, Esq., Hakluyt Society.

Firdausi: Shahnameh, in Persian and French (to be had at Thacker's, Bombay).

Tod, James: Rajasthan (a reprint to be had at Thacker's, Bombay).

Indian Guide Books, published by Messrs. Thacker & Co., Bombay, and by Messrs. Thacker, Spink & Co., Calcutta.

	Rs.
Keene's Guide to Delhi	2-12
——— Agra	2-4
——— Lucknow, Allahabad	2-12
Maclean's Guide to Bombay	5-0
Murray's Handbooks, Part 1, Madras	9-8
——— Part 2, Bombay...	9-8
Sherring's Guide to Benares	2-4
Tourist's Guide, Calcutta to Mooltan, Allahabad to Bombay ...	2-8
The Cashmir Handbook, by Ince	5-0
Bholanath Chunder's Travels of a Hindu	12-0
How we did the Lions of the North-West	1-0
The Delhi Handbook, by Stephen	0-8
The Tourist's Guide	2-0
The Archæology of Delhi, by Carr Stephen.	
History of Mandu, by a Bombay Subaltern, published in Bombay Education Society's Press for the Maharajah of Dhar.	

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Catalogue of Books, &c., bearing on Indian Art.

ALEXANDER (JAMES EDWARD).—Travels from India to England; comprehending a visit to the Burma Empire, and a journey through Persia, Asia Minor, European Turkey, etc, in the years 1825-26. Illustrated with maps and plates.—*4to: London, 1827.*

ANNESLEY (GEORGE VISCOUNT VALENTIA).—Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia, and Egypt, in the years 1802-06. By George Viscount Valentia. Plates and maps. *—3 vols., 4to: London, 1809.*

ATKINSON (JAMES).—Sketches in Afghanistan, by James Atkinson, Esq., [lithographed plates by Louis and Charles Haghe].—*Folio: London, n. d., 1842.*

BELNOS (MRS. S. C.).—The Sundhya or the Daily Prayers of the Brahmins. Illustrated in a Series of Original Drawings from nature, demonstrating their attitudes and different signs and figures performed by them during the Ceremonies of their morning Devotions, and likewise their Poojas, etc. In 24 (coloured) plates, by Mrs. S. C. Belnos.—*Imp. folio: London, 1851.*

BELNOS (MRS. S. C.).—Twenty-four Plates, illustrative of Hindoo and European Manners in Bengal. Drawn on stone by A. Colin, from sketches by Mrs. Belnos (text in English and French).—*Folio : London, n. d.*

BIRD (JAMES).—Historical Researches on the Origin and Principles of the Buddha and Jaina Religions, illustrated with descriptive account of the Sculptures in the Caves of Western India, with Translations of the Inscriptions from those of Kanari, Karli, Ajanta, Ellora, Nasik, &c., which indicate their connexion with the Coins and Topes of the Punjab and Afghanistan. 53 plates.—*Folio : Bombay, 1847.*

BIRDWOOD (GEORGE C. M., C.S.I., M. D.), now SIR G.—The Industrial Arts of India. With map and woodcuts. Published for the Committee of Council on Education.—*2 vols., large cr. 8vo : London, 1880.*

BLAGDON (FRANCIS WILLIAM).—A Brief History of Ancient and Modern India, from the Earliest Periods of Antiquity to the termination of the late Mahratta War.—*Obl. folio : London, 1805.*

BREEKS (JAMES WILKINSON).—An Account of the Primitive Tribes and Monuments of the Nilgiris. By the late J. W. Breeks; edited by his widow.—*4to : London, 1873.*

BROUGHTON (THOMAS DUER).—The Costume, Character, Manners, Domestic Habits, and Religious Ceremonies of the Mahrattas. With 10 coloured engravings, from drawings by a native Artist.—*4to : London, 1813.*

BUCHANAN (DR. FRANCIS).—A Journey from Madras through the countries of Mysore, Canara, and Malabar, performed under the orders of the Most Noble the Marquis of Wellesley, Governor General of India, for the express purpose of investigating the state of Agriculture, Arts, and Commerce; the Religion, Manners, and Customs; the History, Natural and Civil, and Antiquities, in the Dominions of the Raja of Mysore, and the countries acquired by the Hon. East India Company, in the late and former wars, from Tippoo Sultan. By Francis Buchanan, M.D. Illustrated by a map and numerous other engravings.—*3 vols., 4to : London, 1807.*

BURGESS (JAMES).—Archæological Survey of Western India. Vol. I., Report on the First Season's Operations in the Belgâm and Kaladgi Districts, January to May, 1874; Vol. II., Report on the Antiquities of Kathiawad and Kach, 1874-75; Vol. III., Report on the Antiquities in the Bidar and Aurangabad Districts, in the territories of His Highness the Nizam of Haidarabad, 1875-76. 3 vols., with photograph and lithograph plates.—*Royal 4to : London, 1874-78.*

BURMESE WAR, THE.—(Eighteen coloured views taken at and near Rangoon, by Lieutenant Joseph Moore, 89th Regiment; and six coloured engravings illustrative of the combined operations of the Forces in the Burman Empire, 1824 and 1825. Painted by T. Stothard, R. A., from original sketches by Captain Marryat, R. N.).—*Obl. folio : London, 1826.*

BURNES (LIEUTENANT ALEXANDER).—Travels in Bokhara; being the account of a journey from India to Cabool, Tartary, and Persia; also the narrative of a voyage on the Indus from the sea to Lahore, with presents from the King of Great Britain, performed under the orders of the Supreme Government of India, in the years 1831, 1832, and 1833.—*3 vols., roy. 8vo: London, 1834.*

CALDECOTT (JOHN).—Description of an Observatory established at Trevandrum by His Highness the Raja of Travancore.—*4to: Madras, 1837; London, 1839.*

CLARK (MRS. H.). Summer Scenes in Kashmeer. Drawn on stone by J. Needham, from sketches by Mrs. H. Clark (12 lithographs).—*Imp. folio: London, 1858.*

COLE (HENRY HARDY).—Illustrations of Ancient Buildings in Kashmir prepared under the authority of the Secretary of State for India in Council, from photographs, plans, and drawings taken by order of the Government of India. By Henry Hardy Cole, Lieutenant, R.E., etc.—*Folio: London, 1870.*

COLE (HENRY HARDY).—The Architecture of Ancient Delhi, especially the Buildings around the Kutub Minar, by Henry Hardy Cole, Lieutenant, R.E., etc.—*Folio: London, 1872.*

COLE (HENRY HARDY).—Illustrations of Buildings near Muttra and Agra, showing the mixed Hindu-Mahomedan style of Upper India, prepared at the India Museum under the authority of the Secretary of State in Council, from photographs, plans and drawings taken by order of the Government of India by Henry Hardy Cole, Lieutenant, R. E.—*Folio: London, 1873.*

COLE (HENRY HARDY).—Catalogue of the Objects of Indian Art exhibited in the South Kensington Museum, compiled for the Science and Art Department by H. H. Cole., Lieutenant, R.E. Illustrated by woodcuts and a map of India showing the localities of various art industries.—*8vo: London, 1874.*

CORDINER (JAMES).—A Description of Ceylon, containing an Account of the Country, Inhabitants, and Natural Productions; with narratives of a tour round the island in 1800, the Campaign in Candy in 1803, and a journey to Ramistoram in 1804. Illustrated by 25 engravings from original drawings.—*2 vols., 4to: London, 1807.*

COSTUMES.—A collection of fifty-nine original coloured drawings of Indian costumes—*4to.*

COSTUMES, Indian.—Fifty-three original coloured drawings of Indian costumes.—*8vo.*

CUNNINGHAM (ALEXANDER).—An Essay on the Arian Order of Architecture as exhibited in the Temples of Kashmir, by Alexander Cunningham. [Plates.]—*8vo: Calcutta, 1848.*

CUNNINGHAM (ALEXANDER).—The Bhilsa Topes; or Buddhist Monuments of Central India, comprising a brief historical sketch of the rise, progress, and decline of Buddhism, with an account of the opening and examination of the various groups of Topes around Bhilsa. By Brevet-Major Alexander Cunningham. Illustrated with thirty-three plates.—*8vo: 1854.*

Cunningham (Alexander).—The Ancient Geography of India. I—The Buddhist Period, including the campaigns of Alexander and the travels of Hwen Thsang. With 13 maps.—*Royal 8vo : London, 1871.*

Cunningham (Alexander).—The Stupa of Bharhut or Buddhist Monument ornamented with numerous sculptures illustrative of Buddhist legend and history in the third century B. C. Published by order of the Secretary of State for India. With 57 plates.—*4to : London, W. H. Allen & Co., &c., 1879.*

Daniell (T. and W.).—Antiquities and Views in India, from the drawings of Thomas Daniell. 143 engravings (one wanting).—*Large folio: London, 1799.*

Daniell (Thomas and William).—A Picturesque Voyage to India, by the way of China, by Thomas Daniell, R. A. and William Daniell, A.R.A.—*Obl. 4to : London, 1810.*

Daniell (William). Eastern Legendary Tales and Oriental Romances; being a representation of oriental manners and habits, exhibiting a true picture of eastern society. Embellished with engravings on steel, from drawings by the late W. Daniell, R. A. —*2 vols., 8vo : n. d.*

Dixon (C. J.).—Sketch of Mairwara; giving a brief account of the origin and habits of the Mairs, their subjugation by a British Force; their civilisation, and conversion into an industrious peasantry; with descriptions of various works of irrigation in Mairwara and Ajmeer, constructed to facilitate the operations of agriculture, and guard the districts against drought and famine. Illustrated with maps, plans, and views, by Lieutenant-Colonel C. J. Dixon —*4to : London, 1850.*

Dow (Alexander).—The History of Hindustan ; translated from the Persian. The second edition, revised, altered, corrected, and greatly enlarged.—*2 vols., 4to : London, 1770.*

D'Oyley (Sir Charles, Bart.).—The Costume and Customs of Modern India; from a collection of drawings by Charles D'Oyley, Esq.; engraved by J. H. Clark and C. Dubourg; with a preface and copious descriptions, by Captain Thomas Williamson.—*Fol.: London, 1813.*

D'Oyley (Sir Charles, Bart.).—The European in India, from a collection of drawings by C. D'Oyley engraved by J. H. Clark and C. Dubourg; with a preface and copious descriptions, by Captain Thomas Williamson; accompanied with a brief history of Ancient and Modern India by F.W. Blagdon.—*4to : London, 1813.*

D'Oyley (Sir Charles, Bart.).—Views of Calcutta and its Environs. By the late Sir Charles D'Oyley, Bart. (26 lithographs).—*Imp. folio: London, 1848.*

Eden (Honourable Miss E.).—Portraits of the Princes and People of India.—*Folio : London, 1844.*

ELLIOTT (COMMANDER ROBERT).—Views in India, China, and on the Shores of the Red Sea; drawn by Prout, Stanfield, Cattermole, Purser, Cox, Austen, &c., from original sketches by Commander Robert Elliott, R. A., with descriptions by Emma Roberts.—*2 vols. in 1, 4to, n. d.*

FANE (HENRY EDWARD).—Five Years in India; comprising a Narrative of Travels in the Presidency of Bengal, a Visit to the Court of Runjeet Sing, a Residence in the Himalayah Mountains, an Account of the late Expedition to Cabul and Afghanistan, Voyage down the Indus, and Journey Overland to England, by Henry Edward Fane, Esq.—*2 vols., 8vo: London, 1842.*

FERGUSSON (JAMES).—Illustrations of the Rock-cut Temples of India. Selected from the best examples of the different series of caves at Ellora, Ajunta, Cuttack, Salsette, Karli, and Mahavellipore. Drawn on stone by Mr. J. C. Dibdin, from sketches carefully made on the spot, with the assistance of the camera lucida, in the years 1838-39. By James Fergusson Esq.—Text *8vo,* atlas *folio: London, 1845.*

FERGUSSON (JAMES).—The Rock-cut Temples of India Illustrated by seventy-four photographs taken on the spot by Major Gill. Described by James Fergusson, F. R. S.—*8vo. London, 1864.*

FERGUSSON (JAMES).—On the Study of Indian Architecture. By James Fergusson F.R.S. From the "*Journal of the Society of Arts,*" December 21st, 1866.—*10 pp., royal 8vo: 1866.*

FERGUSSON (JAMES).—Tree and Serpent Worship or Illustrations of Mythology and Art in India in the first and fourth centuries after Christ. From the sculptures of the Buddhist Topes at Sanchi and Amravati. Prepared under the authority of the Secretary of State for India in Council. With introductory essays and descriptions of the plates by James Fergusson, Esq., 99 photographs and lithographs.—*4to: London, 1868.*

FERGUSSON (JAMES).—Tree and Serpent Worship, etc, second edition, revised, corrected, and in great part re-written.—*4to: London, 1873.*

FERGUSSON (JAMES).—Illustrations of Various Styles of Indian Architecture. A series of fifteen photographs of some of the most important buildings in India, erected between B. C. 250 and A. D. 1830. With a lecture on the Study of Indian Architecture, read at a meeting of the Society of Arts, on 19th December 1866, by James Fergusson, F.R.S., and a report of the discussion which ensued. (Printed for the use of the Schools of Art in the United Kingdom.)—*8vo: London, 1869.*

FERGUSSON AND BURGESS.—The Cave Temples of India.—*8vo: London, 1880.*

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FORBES (JAMES).—Oriental Memoirs; selected and abridged from a series of familiar letters written during seventeen years' residence in India, including observations on parts of Africa and South America, and a narrative of occurrences in four India voyages. Illustrated by engravings from original drawings, by James Forbes.—*4 vols., 4to: 1813.*

FORREST (LIEUTENANT-COLONEL).—A Picturesque Tour along the Rivers Ganges and Jumna, in India, consisting of twenty-four highly finished and coloured views, a map and vignettes, from original drawings made on the spot, with illustrations, historical and descriptive, by Lieutenant-Colonel Forrest.—*4to: 1824.*

FRANCIS (CHARLES RICHARD).—Sketches of Native Life in India, with views in Rajpootana, Simla, etc., etc.—*Folio: London, 1848.*

FRASER (JAMES BAILIE).—Journal of a Tour through Part of the Snowy Range of the Himalaya Mountains, and to the Sources of the Rivers Jumna and Ganges. (With an appendix.)—*4to*, and plates *folio: London, 1820.*

FRASER (JAMES BAILIE).—(Views of Calcutta. Coloured plates.)—*Large folio: London, 1824-26.*

GILBERT (LINNEY).—India Illustrated; an Historical and Descriptive Account of that Important and Interesting Country. By Linney Gilbert. With numerous splendid steel engravings, after drawings by William Daniell, Esq., R.A.—*8vo: London, n. d.*

GOUGH (RICHARD).—A Comparative View of the Ancient Monuments of India, particularly those in the island of Salsette near Bombay, as described by different writers. Illustrated with prints. [By Richard Gough.]—*4to: London, 1785.*

GRINDLAY (ROBERT MELVILLE).—Scenery, Costumes, and Architecture chiefly on the Western Side of India, by Captain Robert J. Melville Grindlay, with 36 coloured plates.—*Folio: London, 1826-30.*

HARDINGE (HONOURABLE CHARLES STEWART).—Recollections of India. Drawn on stone by J. D. Hardinge, from the original drawings of the Honorable Charles Stewart Hardinge. Part I.—British India and the Punjab. Part II.—Kashmir and the Alpine Punjab.—Atlas *folio: 1847.*

HARRIS (CLAUDIUS).—The Ruins of Mandoo, the Ancient Mahommedan Capital of Malwah, in Central India. By J. Guiaud, from the original sketches of Captain Claudius Harris, with descriptive and historical notices (chiefly founded on Sir J. Malcolm's "History of Central India") and an appendix.—*Folio: London, 1860.*

Hart (Captain Lockyer Willis).—Character and Costumes of Afghanistan, by Captain Lockyer Willis Hart, 22nd Regiment Bombay N. I. (Lithographed by Charles Haghe).—*Folio: 1843.*

Hindoos, The.—(Library of Entertaining Knowledge).—*2 vols.: London, 1834.*

Hodges (William).—Select Views in India, drawn on the spot in the years 1780, 1781, 1782, and 1783, and executed in aqua tinta, by W. Hodges, R.A. 48 plates, coloured by hand by the artist, with description in English and French.—*Imp. folio: London, 1786.*

Hodges (William).—Travels in India during the years 1780-83. 14 plates.—*4to: London, 1783.*

Home, (   ).—Select Views in Mysore, the country of Tippoo Sultan; from drawings taken on the spot, by Mr. Home, with historical descriptions in Persian and English. 29 plates and 4 maps.—*Royal 4to: London, 1794.*

Hope and Fergusson.—Architecture at Ahmedabad, the Capital of Goozerat, photographed by Colonel Biggs, R.A., with an Historical and Descriptive Sketch, by Theodore C. Hope, and Architectural Notes by James Fergusson. Published for the Committee of Architectural Antiquities of Western India.—*4to: 1866* —Supplemental Volume of Plates *4to: 1866.*

Hunter (Alexander).—The Antiquities of Mahavellipooram, or the Seven Pagodas. A Lecture delivered before the Native Christian Literary Society, March 22nd, 1872.—*8vo: Madras, 1872.*

Hunter (Alexander).—Correspondence on the Subject of the Extension of Art Education in the different parts of India.—*8vo: Madras, 1867.*

Hunter (James).—Picturesque Sceneries in the Kingdom of Mysore, from 40 drawings taken on the spot by J. Hunter, Lieutenant in the Royal Artillery, serving in a detachment from that corps under Marquis Cornwallis, in the war with Tippoo Sultan. Engraved under the direction of Edward Orme (coloured plates).—*Obl. fol.: London, 1805.*

Hunter (W. W.).—Orissa, by W. W. Hunter. With plates.—*2 vols., 8vo: London, 1872.*

India.—To India, and back by the Cape. By a Traveller. With numerous drawings on wood and stone, by John Corbet Anderson: 18 plates.—*4to: Croydon, 1858.*

India Museum.—Return to an Address of the Honorable House of Commons, dated 20th July 1876, for "copy of the Resolutions or Resolution of the Secretary of State for India in Council respecting the transfer, with the opinions of the Members of Council recorded thereon."—*fcap. fol.: London, 1876.*

INDIA MUSEUM.—The Textile Fabrics at the India Museum, and Projected New Work on the Manufactures of India. (Articles from *The Times, The Saturday Review,* &c.)—*14 pp., 8vo: London, 1879.*

INDIAN INSTITUTE.—The Proposed Indian Institute. Article from *Fraser's Magazine,* April 1875.—*8vo.*

INDIAN ORNAMENT.—A Collection of Drawings in Water Colours from Objects of Indian Manufacture in the Great Exhibition of 1851. —*In portfolios.*

JAMES (A. G. F. ELIOT).—Indian Industries.—*Cr. 8vo: London, 1880.*

JAMES (CAPTAIN).—Military Costume of India, in an exemplification of the manual and platoon exercises for the use of the Native Troops and the British Army in General. With 35 coloured plates.—*Folio: London, 1813.*

KERSHAW (JAMES).—Series of Views in the Burman Empire, drawn by J. Kershaw (engraved by W. Daniell). 10 plates.—*Obl. fol., no title: London, 1838.*

KITTOE (MARKHAM).—Illustrations of Indian Architecture from the Muhammadan Conquest downwards, selected from a portfolio of architectural drawings, prepared with much care, and principally by regular measurements, from buildings at Agra, Delhi, Jaunpur, Benares, Chunar, and numerous other places in Upper India. By Markham Kittoe, Esq. Parts 1-12.—*Obl. folio: Calcutta, 1838.*

LANGLES (LOUIS MATTHIEU).—Monuments Anciens et Modernes de l'Hindoustan, décrits sous le Double Rapport Archæologique, et Pittoresque, et précédés d'une notice géographique, d'une notice historique, et d'un discours sur la religion, la législation et les mœurs des Hindous, par L. Langlés. Ouvrage orné de cent quarante-quatre planches et de trois cartes géographiques, dressées par M. Barbié Dubocage.—*2 vols., folio: Paris, 1821.*

LEWIN (T. H.).—Wild Races of South-Eastern India. By Captain T. H. Lewin.—*Post 8vo: London, 1870.*

LUARD (JOHN,—Captain, afterwards Major). Views in India, St. Helena, and Car Nicobar. 60 plates.—*Sm. fol.: London, 1833.*

MACKENZIE (HELEN, MRS.).—Six Years in India. Delhi, the City of the Great Mogul; with an Account of the various Tribes in Hindostan, Hindoos, Sikhs, Affghans, &c. A new edition of "The Mission, the Camp, and the Zenana." Revised and corrected by the author.—*8vo: London, 1857.*

Illustrations of the Mission, the Camp, and the Zenana, drawn by Mrs. Colin Mackenzie.—*Fol.: London, 1856.*

MANDELSLO (JOHANNES ALBERTUS VAN).—French translation. Voyages faits de Perse aux Indes-Orientales, mis en ordre par Adam

Olearius, et traduits de l'Allemande, par Abraham de Wicquefort. Nouvelle edition, revué et augmentée; avec une table des cartes géographiques, des représentations des villes, et autres taille-douces.—*2 vols. in 1, folio: Leide, chez Pierre Vandercla, 1719.*

MANNING (MRS.).—Ancient and Mediæval India. By Mrs. Manning. With plates.—*2 vols., 8vo: London, 1869.*

MARKHAM (CLEMENTS R.).—A Memoir of the Indian Surveys, printed by order of Her Majesty's Secretary of State for India in Council. With maps.—*Folio: London, 1871.*

MARTIN (R. M.).—The Indian Empire; its History, Topography, Government, Finance, Commerce, and Staple Products. Illustrated with maps, portraits, views, &c., from original sketches.—*Royal 8vo: London, 1857.*

MAURICE (REVD. THOMAS).—The History of Hindustan; its Arts and its Sciences, as connected with the History of the other Great Empires of Asia, during the most ancient periods of the World. With numerous illustrative engravings, by the author of Indian Antiquities.—*2 vols., 4to, plates: London, 1795-98.*

MAURICE (THOMAS).—Indian Antiquities; or Dissertations relative to the ancient geographical divisions, the pure system of primeval theology, the grand code of civil laws, the original form of government, the widely extended commerce, and the various and profound literature of Hindustan: compared throughout with the religion, laws, government and literature of Persia, Egypt, and Greece—*7 vols., 8vo: 1800.*

MOOR (E).—The Hindu Pantheon.—*4to: London, 1810.*

MORTIMER (STANLEY).—Narrative to accompany Photographs of Maha Balipooram, from Dr. Babington's Translations, R.A.S. Illustrations of Rock Cut Temples, by James Fergusson, Esq., D.C.L., F.R.G.S., Chambers' Asiatic Researches, Madras Journal of Literature and Science, and Oliver and Boyd's History of British India.—*Crown 8vo: London, 1876.*

MUSEUM, SOUTH KENSINGTON.—India Museum. Inventory of the Collection of Examples of Indian Art and Manufactures. Transferred to the South Kensington Museum.—*Folio: London, 1880.*

ORME (WILLIAM).—Twenty-four views in Hindustan drawn (in water colours) by William Orme, from the original pictures painted by Mr. Daniell and Colonel Ward, now in the possession of Richard Chase, Esq., with letter-press. Also fifty-nine water colour drawings of costumes of natives of Hindustan. Mounted and bound in two vols.—*Imp. folio: London, 1800?*)

PENNANT (THOMAS).—The View of Hindustan: Vol. I, Western Hindustan; Vol. II, Eastern Hindustan.—*4to, with map and 23 plates: London, 1798.*

PRICE (WILLIAM).—Journal of the British Embassy to Persia; embellished with numerous views taken in India and Persia: also a Dissertation upon the Antiquities of Persepolis. By William Price, F.R.S.L. Second edition.—*2 vols. in one, obl. 4to: 1832.*

PRINSEP (JAMES).—Benares illustrated, in a series of drawings. By James Prinsep. Lithographed in England by eminent artists. First and second series.—*Sm. folio: Calcutta, 1830-31.*

PRINSEP (JAMES).—Essay on Indian Antiquities, Historic, Numismatic and Palæographic. To which are added useful Tables, illustrative of Indian History, Chronology, Modern Coinages, Weights, Measures, &c. Edited, with notes and additional matter, by Edward Thomas, with numerous illustrations.—*2 vols., 8vo: London, 1858.*

PRINSEP (VALENTINE C., A.R.A.)—Imperial India. An Artist's Journal, illustrated by sketches taken at the Courts of the principal Chiefs in India. 2nd edition. With 24 wood engravings and 3 maps.—*8vo: London, 1879.*

RAM RAZ.—Essay on the Architecture of the Hindus. With 48 plates —*4to: London, 1834.*

RAVENSHAW (JOHN HENRY).—Gaur: its Ruins and Inscriptions. By the late J. H. Ravenshaw, B.C.S. Revised, with considerable additions and alterations, by his widow. (Photographs.)—*4to: London, 1878.*

RIVETT-CARNAC (J. A.).—Prehistoric Remains in Central India. By J. H Rivett-Carnac, Esq., C.I.E., M.R.A.S., F.S.A., &c. In the "Journal of the Asiatic Society of Bengal." Vol. XLVIII, Part I, No. I., 1879.—*4to: Calcutta, 1879.*

ROUSSELET (LOUIS).—L'Inde des Rajahs. Voyage dans l'Inde Centrale et dans les Présidences de Bombay et du Bengale. Par Louis Rousselet. Ouvrage contenant 317 gravures sur bois, dessinées par nos plus célèbres artistes, et six cartes.—*Royal 4to: Paris, 1875.*

RUSSELL (WILLIAM HOWARD).—The Prince of Wales' Tour. A diary in India; with some account of the visit of his Royal Highness to the Courts of Greece, Egypt, Spain and Portugal. With illustrations by Sydney P. Hall, M.A.—*Imp. 8vo: London, 1877.*

SALT (HENRY).—Twenty-four Views, in St. Helena, the Cape, India, Ceylon, the Red Sea, Abyssinia, and Egypt. From drawings by Henry Salt, Esq. Coloured plates.—Text *4to;* Atlas *elephant folio: London, 1822.*

SALTUIKOV (ALEKSYEI D., PRINCE).—Indian Scenes and Characters, sketched from life by Prince A. Saltuikov. Edited by Edward B. Eastwick,—*Folio: London, 1859.*

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List of some Historical British Monuments and Memorials worthy of preservation on account of their public interest, dated 13th July 1882.

(Under correction.)

1. The Ochterlony Monument on the Calcutta maidan; built in 1825 in honour of Sir David Ochterlony. The column is of plastered brick.
2. Pedestrian statue of Lord William Cavendish Bentinck, Governor General; erected in 1835 in front of the Calcutta Town Hall; bronze.
3. Pedestrian statue of George, Earl of Auckland, Governor General; erected in 1848; inside the Eden Gardens, Calcutta; bronze.
4. Pedestrian statue of Sir William Peel, Calcutta; white marble.
5. Equestrian statue of Henry, Viscount Hardinge, on the Calcutta maidan; bronze.
6. Equestrian statue of Sir James Outram (by Foley, 1874), Calcutta; bronze.
7. Statue of the Marquess of Hastings (in the Dalhousie Institute) Calcutta.
8. Statue of Lord Lawrence, Calcutta.
9. Statue of Lord Mayo, Calcutta.
10. Lady Canning's tomb in Barrackpore Park.
11. Cenotaph in Barrackpore Park, erected by the Earl Minto containing the following mural tablets:—to the memory of officers who fell at the conquest of Java, 1810-12; also to the memory of officers who fell at the conquest of the Isle of France, 1810; and to the memory of the officers who fell at Maharajpore, 1843.
12. Cenotaph close to the Judge's kutcherry at Bankipore, erected in memory of Major Knox, who in 1760 relieved Patna when besieged by the Emperor Shah Alum.
13. Tall stone shaft in Patna City, erected in memory of 48 servants of the East India Company and 100 European soldiers massacred by Mir Kassim Ali, Subadar of Bengal, when the British were marching to the rescue of their countrymen in Patna in 1763. Among the victims were Mr. Ellis (Resident of Patna) and Messrs. Hay and Lushington (Members of Council).

13a. Two monuments at Bhagalpur to the memory of Mr. Augustus Cleveland, Collector of Bhagalpur; one of brick, erected by the district landholders, and the second of stone, sent out by the Court of Directors from England.

14. A small cross in the disused burial ground enclosed in the Bhagalpur race course, erected to the memory of officers and men of Her Majesty's 3rd Buffs, interred in 1826.

15. Monument at Aligarh to the memory of officers and men who fell at the taking of Aligarh in 1803. North-Western Provinces.

16. Tomb at Aligarh of Major Robert Nairn, 6th Bengal Cavalry, who fell at the siege of Kutchowra in 1808.

17. Monument at Aligarh to the memory of officers and men who fell during the Mutiny, 1857.

18. Two memorial pillars erected to the memory of the officers who fell at the storming of the Kalinga Fort in 1814, Dehra Dun.

19. Monument at Fatehgunj near Bareilly to the memory of the officers and men who fell near Fatehganj against the Rohillas in 1794.

20. Tomb of the late Mr. Thomason, Lieutenant-Governor, North-Western Provinces, in the Churchyard of Christ Church, Bareilly.

21. Tomb of Lieutenant-Governor the Hon'ble John Russell Colvin at the Palace of Agra.

22. At Goverdhun a massive monolith bearing an inscription setting forth that Colonel Seymour, C. B., will punish any soldier who shoots game in the neighbourhood.

23. Monument at Aligarh to the memory of Ensign Marsh and others killed on the Agra and Aligarh road in 1857.

24. Tombs at Shewalaghat, Benares, of three British officers who were killed in the disturbance of Rajah Cheyt Singh.

25. Memorial cross at Fatehgarh in memory of those who fell during the Mutiny, 1857.

26. Tomb in Cawnpore Memorial Church compound erected to the memory of Major Vibart and 70 officers and men who escaped from the massacre at Cawnpore in June 1857 and were captured and murdered at Sheorajpúr.

27. Tomb near the Cawnpore Church erected by the Memorial Church Committee over the remains of those that were first killed in the entrenchment in June 1857.

28. Well in the Memorial Church compound covered with a stone and inscription.

29. Large stone cross at the barracks, Cawnpore, erected over the well in which those that lost their lives in the entrenchment were buried in 1857.

30. Statue (by Marochetti) and enclosure over the well in the Memorial Gardens, Cawnpore.

31. Memorial at Azamgarh erected to the memory of the officers and men who were killed at the battle of Azamgarh.

32. Mausoleum of Lord Cornwallis at Ghazipúr by Flaxman.

33. Monuments at Jhansi in memory of those killed in the Mutiny, 1857.

34. The space in front of the Tarawali Kothi, where two parties of Europeans were murdered in 1857; a memorial has been Oudh. Lucknow.

Lucknow

put up to commemorate these massacres almost on the spot where they occurred.

35. On left of "Goosainganj" Road, about ½ mile from "Dilkoosha," and on this side of bridge, over "Pangri" Nullah—Lieutenant Percy C. Smith, 97th Regiment.

36. About fifty yards on left flank of "Dilkoosha" in an enclosure, Major the Hon'ble Barrington R. Pellew and Ensign L. E. Cooper, 2nd Battalion, Rifle Brigade.

37. In rear of the General's house, Captain Charles William McDonald, 93rd Highlanders; Lieutenant Lowick Emilius Cooper, 2nd Battalion, Rifle Brigade; Lieutenant Charles Warden Sergison, 93rd Highlanders, and Charles Evans, 93rd Band.

38. In the "Belatibagh," Captain H. Hutchinson, 9th Royal Lancers, Sergeant S. Newman, 9th Royal Lancers, and Mr. Henry B. Garvey, Acting Mate, Her Majesty's S.S. *Shannon*.

39. In rear of the right flank of "La Martiniere"—Captain W. S. R. Hodson of Hodson's Horse; Captain L. D'Acosta, 56th Native Infantry.

40. Under a tree on the left of the road going from "La Martiniere" to "Wingfield Park Bridge"—Lieutenant Augustus Otway Mayne, Bengal Artillery.

41. About fifty yards on the left of "Secundrabagh"—Lieutenant Francis Dobbs, and 5 Privates of 1st Madras Fusiliers.

42. Off the road between "Mushidzadi's Tomb" and the Kaiserbagh—Captain T. Clarke, R.E., Lieutenant E. P. Brownlow, R.E., Corporal F. Morgan, Lance Corporal J. Davies, and 12 Sappers.

43. At "Secundrabagh" Bridge on the left bank of "Gumti"—Lieutenant W. R. Moorsom, 52nd Light Infantry, Deputy Assistant Quarter Master General, 1st Division.

44. About 2½ miles on and close to the left of "Fyzabad" road—Captain W. F. Thynne, 2nd Battalion, Rifle Brigade.

45. About 150 yards off the right of the "Fyzabad" road, at 50 yards beyond the bridge over the "Gokral" Nullah—Charles Sanford, late Captain of the 3rd Bengal Light Cavalry.

46. Old cantonment cemetery, 3 miles on the "Sítapúr" road to the right—Lieutenant F. G. MacDonald, Adjutant, 2nd Punjab Cavalry; Lieutenant H. G. Richards, 3rd Battalion, Rifle Brigade, and Lieutenant Robert Daly Synge, 90th Light Infantry.

47. About 50 yards to the right of the "Sítapúr" road at the 4th milestone, the 46th Regiment, Cholera Graveyard—Private W. Aston, 46th Regiment.

48. At the "Músabagh"—Captain T. Wale, 1st Sikh Irregular Cavalry.

49\. About ¼ mile off the "Malliabad" road between it and "Músabagh—" Major John Griffiths Price, 2nd Dragoon Guards (Queen's Bays). Oudh. Lucknow.

50\. The 97th Regiment Graveyard on the river road, 1 mile from the Fort, Ramiki Darwaza—Sergeant W. Smith and Sergeant G. Smith, 97th Regiment; Assistant Surgeon W. Dumbreck 97th Regiment.

51\. Steeple monument on the top of "Hazratganj!" near "Kaiserbagh"—Sir Mountstuart Jackson, Bart., Captain Patrick Orr, Lieutenant G. J. H. Burns, 1st Bombay European Fusiliers, Sergeant-Major Morton; on other side G. P. Carew, Esq., Mr. Greene, Miss Jackson, and others, victims of 1857.

52\. In the "Alambagh—" Major T. Perrin, Lieutenant N. G[illegible]J. J. Nunn, and M. Preston, 90th Light Infantry, Lieutenant Dundas W. Gordon, Bengal Artillery, Henry Ayton, 84th Regiment, Major-General Sir H. Havelock.

53\. Tomb about 3¾ miles off the left side of the "Sítapúr" road between the 7th and 8th milestones.

54\. Old "Murriaon" Cemetery and Roman Catholic Cemetery in rear of the "Pussunt" (Revenue or Customs) "Kaiserbagh."

55\. Two tomb-looking enclosures—one close to the right side of the "Seetapore road," about the 8th milestone, nearly opposite the Traveller's Bungalow; the other on the Artillery side of the road, running between their lines and the Lancers.

56\. Lawrence's tomb—Residency.

57\. Cross to those who fell in the defence—Residency.

58\. Memorial to the faithful sepoys of the Bailey Guard, outside the Bailey Guard.

59\. The "Sher Darwaza," where Neill fell.

60\. Tomb of Mr. Ravenscroft, murdered at Bhinga, Oudh, 1823. Oudh.

61\. Mackeson's Obelisk—Peshawar. Punjab.

62\. Bilaspore monument to Captain Showers, four or five hundred yards to the East of Ruttem Ghar, 1-19th Bengal Native Infantry, storming the Malown Heights, 15th April 1815.

63\. Also to Lieutenant Lawtis, R.E., rude tomb of stones; a monument was erected to him in the Cathedral Church of Calcutta.

64\. Lieutenant Thackery, 26th Native Infantry, killed at the siege of Jeytuk; his tomb on the bank of a tank at Nahun. This monument is a lofty pyramid on a pedestal without any inscription; there are three other graves.

65\. In front of the Delhi Church is a massive marble cross, sacred to the memory of those who were massacred in May 1857.

66\. The Delhi magazine rendered famous by the intrepid Willoughby.

67\. John Nicholson's grave in the cemetery, Delhi, facing the Kashmir Gate.

Punjab.

68. Flag-Staff Tower, Delhi.

69. The monument on the Ridge, Delhi.

70. Monument and fountain in memory of General John Nicholson, who fell at Delhi, 1857, at Margulla, between Rawalpindi and Attock.

71. Memorial monument of the siege of Delhi, 1857; Delhi.

72. Battle-field monument at Mudki, Ferozpur.

73. Battle-field monument at Ferozeshah.

74. Battle-field monument at Sobraon.

75. Tomb of Sir Henry Durand at Dera Ismail Khan.

76. Tomb of Lord Elgin at Dhurmsalla.

77. Monument in memory of those killed at Hissar in 1857.

78. Memorial at Montgomery of Leopold Oliver Fitzhardinge Berkely, Extra Assistant Commissioner, killed in 1857.

79. Monument over the bodies of officers killed at Chatrian, Sirsa District, 1857.

80. Battle-field obelisk at Gujrat.

81. Battle-field obelisk at Chilianwalla, and graves of men who fell in 1849.

82. Battle-field obelisk at Aliwal, Ludhiana.

83. Monument erected in memory of Mr. Vans Agnew and Lieutenant William Anderson, at Mooltan, in the Fort.

Mysore.

84. Equestrian Statue of Lieutenant General Sir Mark Cubbon, Commissioner of Mysore and Coorg (by Marochetti) in front of the Mysore Government offices, Bangalore, bronze.

85. Cenotaph of the officers who fell at the siege of Bangalore, 1792.

Bombay.

86. Statue of Sir Charles Forbes. 87. Statue of Hon'ble Mountstuart Elphinstone. 88. Statue of Sir John Malcolm. 89. Statue of John, Lord Elphinstone. 90. Sitting statue of Mr. Stephen Babington. 91. Statue of Sir Bartle Frere. 92. Sitting statue of Mr. Charles Norris. 93. Sitting statue of Sir Jamsetjee Jejeebhoy.	In the Town Hall, Bombay.
94. Statue of Lord Cornwallis 95. Sitting statue of the Marquis of Wellesley.	Garden enclosure of the Elphinstone Circle, Bombay.

96. Sitting statue of Her Majesty Queen Victoria on the Esplanade, Bombay.

97. Statue of the Prince of Wales.

98. Statue of Prince Albert.

99. Statue of the Hon'ble Jugganath Sunkersett, in the Fort.

100. Statue of Sir Jamsetjee Jejeebhoy, Bart., Jamsetjee Jejeebhoy Hospital, Byculla.

101. Memorial marble tablets of the officers and men who fell in the Afghanistan and Sind campaigns, on the walls of the apse and chancel of St. John's Church at Colaba.

102. Old Dutch tombs at Ahmedabad. Bombay.

103. Monument in the wall of the town of Ahmadnuggur, naming those who fell at the storming of the city in 1803.

104. Monument at Koregaum, near Poona, to the 2nd Bombay Grenadiers.

105. Grave in Kanara of Lord St. Maur, son of the Duke of Somerset, killed in 1865 by a bear at Kirwatty, near Yellapur.

106. Grave in Kanara of Lieutenant Carpendale, who died at Yellapur while surveying the Arbyle Ghaut Road.

107. Memorial cross at Poona to Lord Frederick FitzClarence.

107*a*. Monument at Kawulkad, Kanara, in memory of Lieutenant John Edgar Leslie, Madras Native Infantry, who died in service on 20th March 1845.

107*b*. Tomb at Murkwad, Kanara, in memory of Lieutenant Mortlock.

108. Monuments at Aden over the officers and men who fell at the capture of Aden in 1839.

109. Tomb of John Thackeray, Collector and Political Agent, killed at Kittur in 1824, during the insurrection, at Kittur in Dharwar.

110. Wooden cross with metal tablet bearing Latin inscription in the "Mula's Ward" of Surat—marks site of ancient Capuchin Chapel.

111. Oxenden Mausoleum, Surat.

112. Tombs at Surat of Gerald Angier (supposed) Bernard Wyche, F. Breton, H. Gary, and B. Harris; former Presidents and merchants of Surat.

113. Tomb of Van Reede, Dutch President of Surat, and other Dutch tombs of same epoch, near the preceding.

114. Tom Coryat's tomb—old European burial ground, Swali, near Surat.

115. Vaux's tomb on right bank of Tapti, not far from its mouth —near Surat.

116. Tomb of Brigadier David Wedderburn, killed at siege of Broach, 1772, near North-Western bastion of Fort Broach.

117. Tomb of Captain William Sempil, killed at Broach, 1803, near village of Pejalpúr, Broach.

118. Tomb of M. Français Montreaux, a Portuguese officer, who seems to have taken part in siege of Broach, 1803, near the Preceding.

119. Dutch tombs—about one mile west of Pejalpúr, Broach.

120. Tomb of Edward Cooke, with peculiar inscription, 1743—Tatta in Sind. Sind.

121. Old European burial ground on Bandar Road, Karachi.

122. Napier Obelisk (1853) in memory of Sir Charles Napier—Napier Mole Road—Karachi.

123. Monument bearing names of officers and men who fell on the battle-field of Miani, Haiderabad, Sind.

124. Monument erected by Sir C. Napier to memory of officers and men, 22nd Regiment, who fell in Sind campaign—in Government House grounds, Karachi.

Rajputana.

125. Bust and inscription at Ajmir of the late Colonel Sutherland.

Central Provinces.

126. Monument and tombs in the Sitabuldi Hill Fort to the memory of officers killed at the battle of Sitabuldi in 1817.

British Burma.

127. Graves at the Shive-Dagsu Pagoda, Rangoon, of officers and men killed at the storming of the Pagoda in 1852.

128. Graves at the Botatoung Pagoda, Rangoon, of officers and men who fell or died in the second Burmese War, 1852.

Assam.

129. Memorial at Cherra Punji to the memory of David Scott, B.C.S., Agent to the Governor General, who died 20th August 1831.

Madras.

130. Equestrian statue of General Neill, 1st Madras Fusiliers—Mount Road; bronze.

131. Equestrian statue of Sir Thomas Munro, once Governor of Madras, middle of island; bronze.

132. On the parade ground facing the Council House, stone canopy covering a large pedestrian marble statue of the Marquis of Cornwallis on a marble pedestal, decorated with groups of figures in alto-relievo, representing the surrender of the sons and suite of Tippu Sultan.

133. White marble statue of Sir Thomas Munro—Fort Church.

134. Cenotaph to the Marquis of Cornwallis, enclosed by an iron railing cast from the cannon taken at the siege of Seringapatam, 1799, by the troops under his command—Mount Road.

135. Cenotaph to Colonel Dalrymple—Parade ground, St. Thomas' Mount.

136. Obelisk in memory of General Sydenham—St. Thomas' Mount.

137. Granite column to Colonel Noble, C.B., erected by the men of the Horse Artillery—St. Thomas' Mount.

138. A half length marble bust (by Chantrey) to Colonel Noble, C.B., placed by the officers, Royal Horse Artillery, in the Church, St. Thomas' Mount.

139. Madras Memorial Hall—erected by public subscription in memory of the Madras Presidency not joining in the Sepoy Mutiny of 1857.

140. "Lal Bagh" Seringapatam, a mausoleum built by Tippu Sultan for his father, and in which he also was buried. The folding doors, inlaid with ivory, were the gift of Lord Dalhousie, and the mausoleum is supported at Government expense.

O

Report on Monuments in Madras, together with a Note on Works undertaken.

Seven Pagodas, Vellore, Trichinopoly, Madura, Tanjore, Kombakonum, Chillambaram, Congeveram, and Bijanagar, dated 23rd June 1881.

Mahavallipur, or the Seven Pagodas.

The rock-cut remains and ancient structural buildings at Mahavallipur are about 30 miles south of the city of Madras, and may be reached by the East Coast Canal, which runs parallel to the sea-shore. My visit was paid in February 1881, when I carefully inspected these very remarkable and valuable monuments.

Publications.

2. Various accounts will be found in "Descriptive and Historical Papers relating to the Seven Pagodas on the Coromandel Coast," by W. Chambers (1772), J. Goldingham (1798), B. G. Babington, F.A.S. (1830), the Revd. G. W. Mahon (1844), Lieutenant J. Braddock (1840), the Revd. W. Taylor (1840), Sir Walter Elliot (1844), and C. Gubbins (1853), edited by Captain M. Carr, printed for the Madras Government, 1869.

3. They are also referred to by Mr. James Fergusson in his "History of Indian and Eastern Architecture," 1876, pages 134, 175, 326, 330, 274, 333: and again by the same author in Fergusson and Burgess' "Cave Temples of India, 1880," Chapters V, VI, VII.

Drawings.

4. Besides these, drawings, plans and sections have been made under the direction of Colonel Sankey, C.B., R.E., Chief Engineer, Madras; and Mr. R. Chisholm, Superintendent of the Government School of Art in Madras, has made a complete set of illustrations of the Rathas.

Photographs.

5. Photographs have been taken by Dr. A. Hunter and Captain Lyon for the Madras Government; also by Mr. Nicholas of Madras.

NOTE.—As so much good can be done by very simple remedies to preserve the great majority of the wonderful monuments that I visited in Madras between the 9th February and the 7th March, I have thought it better to submit a preliminary report. The sketches (which are taken from photographs), rough as they are, give some idea of the state and importance of the buildings. Later, I hope that detailed and accurate plans of the more important examples will be procured.

There are, generally, three classes of monumental buildings—

(1) Those in the charge of Government.
(2) Those the property of Natives or in their use for worship.
(3) Those in Native States.

As regards the provision of funds, there are—

(1) Government grants.
(2) Public subscriptions.
(3) Voluntary expenditure by private individuals or out of endowments.
(4) Expenditure by Native rulers in their own States.

Natives of all creeds voluntarily contribute large amounts for repairs to religious buildings, &c., and the Trustees could see that sums given for the purpose are properly laid out. Religious buildings with State endowments are national property, and as such should not, I submit, be allowed to fall into disrepair or to deteriorate.

Mr. Adam's interest.

6. Mr. Adam, the late Governor of Madras, took considerable interest in these monuments, and early in February last spent some days in their careful examination.

Date.

7. Mr. Burnell and Mr. Burgess agree in adopting the date 650 to 700 A.D. for the excavation of the rock temples and bas-reliefs; and the inference which Mr. Fergusson derives from this conclusion is that the rock-cut edifices at Mahavallipur are the *earliest known examples of the Dravidian style of architecture* of Southern India, and their value becomes at once enormously raised.

The granite remains consist of—

(1) The nine Rathas, or isolated temples cut out of the single boulder.

(2) The thirteen caves excavated out of the rocks at Mahavallipur and two more at Saluvankuppan.

(3) The two great bas-reliefs of Arjuna's penance.

Besides these, there are several structural temples, the most important of which is the so-called "Shore Temple," which has long served as a landmark for shipping.

8. The accompanying sketch maps are taken from the revenue surveys of Mahavallipur and Saluvankuppan in Colonel Sankey's volume of plans and sections; and I have in the following notes adopted the numbers used in that map to indicate the monuments —

9. *No. 2, Pidaramman Ratha* (unfinished).—A monolith, 23 feet high, with its upper half carved into a temple.

10. *No. 3, Pidariamman Ratha.*—This is a similar monolith, and is 25 feet high.

11. *No. 4, Valaiyan Kuttai Ratha.*—This is a similar monolith, and is 23 feet high (see sketch).

12. *Nos. 2, 3 and 4 should be in custody to prevent conversion into a quarry.*

13. *No. 6, the "Alaiva" or "Shore" Temple* (see sketch).—This is a most remarkable monument, probably dating from the 8th or 9th century; and, if not the most early, is one of the best examples of structural primitive Dravidian architecture. Being on the edge of the sea—washed, in fact, by the waves—it has become much decayed by the action of the wind and salt water. Part of the building lies ruined in the surf, and a solitary pillar is left erect in the midst of fallen blocks of stone. My impression is that there existed a colonnade or porch in front, and that this column is part of the structure.

14. Colonel Sankey's volume has plans and sections of the temple; but it would, I think, be well to complete the survey for elevations and details, in order to show the position of the surrounding walls, parts of which are still traceable. Dedicated to both Siva and Vishnu, the main chamber of the building contains a broken lingam, and the vestibule has a reclining figure of Vishnu, 10 feet long. *The stone masonry of the pagoda is much broken and displaced, and should be rendered secure and replaced.*

The interior chambers should be cleaned out and the sand removed, so as to completely reveal the plinth of the exterior.

Sand should also be removed to lay bare the outline of the walls which form the outermost enclosure.

The removal of roots of creepers from the roof is important.

15. *No. 7, the Mahishasura Rock and Chamber.*—Situated north of the Shore Temple and close to the sea. *It should be watched to prevent wilful damage.*

16. *Nos. 12, 13 and 14, the Vishnu and Emberuman Temples.*—Lie between the larger granite hill and the village. Being in use for Hindu worship, they are cared for to a certain extent, and none but Hindus are allowed inside the sanctuaries. Colonel Sankey's volume contains plans and sections of the buildings, showing the interiors of the shrines and the subjects pourtrayed in the bas-reliefs, and so supplies a want to which Fergusson draws attention (see page 158, Fergusson and Burgess' "Cave Temples of India").

17. *No. 15, Krishna Mandapam.*—This is partly a rock excavation and partly structural. The bas-relief, representing Krishna with a group of gopis (herdsmen) and cows, is carved on the solid rock, and measures 40 feet long by 10 feet high. The roof over this rock sculpture is built of masonry, and gives access to a stream of rain water, thus destroying and wearing away the carvings, and covering them with lichen. *The roof should be made water-tight, and the interior, as well as the carvings, thoroughly cleansed. The front row of columns should be filled in with a frame of galvanized wire netting, and the centre fitted with a wicket gate, under lock and key.*

18. *No. 16, an unfinished rock excavation.*—Interesting from an architectural rather than an archæological point of view. One of the front columns is broken and the front half fallen away. *The second row of columns has been bricked up for dwelling purposes, and should be cleared. The cave should be cleaned out and kept in custody; and in order to prevent natives from damaging the interior by lighting their cooking fires, the front should be railed in with a stone railing or wall.*

19. *No. 17, the Great Bas-relief of Arjuna's Penance.*—One of the most remarkable objects of interest. It is carved on two masses of granite rock, measuring about 90 feet long by 30 feet average height. Between the two rocks was the serpent statue of the Naga Raja.* The head of the Raja, overshadowed by a *seven-hooded* serpent, fell to the ground. *This should now be obtained and securely replaced and made fast, not only to the body of the serpent, which is still in position, but should be supported by iron bars let into the two masses of rock. The base of the bas-relief requires clearing of sand.*

20. *No. 21.—A cave* with three niches, the centre one containing a figure of Mahadeva, and the flanks having figures of Vishnu. In front of the cave, 24 feet off, is a circular cistern, No. 20, cut out of a solid stone and called "The Gopis' Churn." *The front of the cave should be fenced to prevent damage.*

21. *No. 24, Ganesa Temple* (see sketch).—This elegant Ratha measures 20 feet 3 inches by 11 feet 4 inches, and is cut out of the solid rock. It is in fair preservation, *but should have the three front openings between the pillars filled with frames of wire netting to prevent the inner chamber being damaged by use as a dwelling or cook house.* Its form and outline are found frequently in southern temples for gateways, but seldom for actual sanctuaries, as in this instance.

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* "It was evident that the head of the Naga Raja had fallen from the accident of its position, the artists having placed it in the centre, where it could have a shadow behind it, but where it had no support. I consequently wrote to my friend Dr. Hunter to try and find it. With the assistance of the then Madras Government he removed the sand and found it lying where it fell. I afterwards made application to the Government to have it replaced, which could easily be done, and so give meaning to the whole bas-relief. This I understood from my friend Mr. Campbell Johnstone, who took out my application, was also sanctioned and ordered to be carried out; but from photographs recently received it appears not only that this has not been done, but that the last has been removed from where it originally stood after its recovery."—(*Fergusson.*)

22. *No. 25, Vishnava Cave* (see sketch).—The interior of the cave measures 29 feet 6 inches by 8 feet 6 inches, and has, amongst other subjects, bas-reliefs of the Boar Avatar and one of Sri Lakshmi, seated on a lotus flower with elephants pouring water over her. *The openings between the columns should be filled in with frames of wire netting, and the front cleared of débris.* On the occasion of my visit stone-blasting had been going on dangerously near, and one huge boulder had been precipitated close to the sculptured cave.

Quarrying should be absolutely forbidden.

23. *No. 27, the Rayala Gopuram.*—This is on the hill overlooking the village temple. It is an unfinished porch of brick and stone, and is surrounded by a good deal of scrub jungle, *which might with advantage be outrooted.*

24. *No. 28, stone couch with recumbent lion as a pillow.*

25. *No. 32, the Mahishamardini Mandapam.*—The sculptures in the cave, which measure 32 feet by 15 feet, are spirited. At the south side is a bas-relief of Narayana or Vishnu resting on the head of the snake Sesha.

At the north side is a representation of Mahishasura and Durga in strife.

In the back are three cells, the central one having a lingam. *One of the four front pillars has completely fallen, and might for appearance sake be replaced, but the rock above is so massive that there is no actual need of support. The sculptures should be cleaned, and the front openings closed with frames of wire netting.*

26. *No. 34, the Iswara Temple.*—A structural temple, 56 feet above No. 32, on the summit of the rock. It rests on a foundation of brick-masonry, but the superstructure is of stone. The roof has fallen in, and *the débris ought to be cleared away from the interior. Creepers should be outrooted from the masonry, and access made easier than at present, as visitors have to scramble over slippery rock to reach the building.*

27. *No. 35, Varahasvami* (Vishnu) *Temple.*—Colonel Sankey's drawings illustrate the bas-reliefs of the interior, and confirm the description given by Fergusson (page 147, " Cave Temples of India "). This cave is inaccessible to any one but Hindus.

28. *No. 37, Draupadi's Ratha* (see sketch).—This monolithic temple measures 11 feet square and 17 feet above the present sand-level. The finial which surmounted the roof has fallen, and may probably be found *in the sand, which should be removed so as to lay bare the plinth down to its base.*

29. *No. 39,* Arjuna's Ratha.*—A monolithic temple measuring 11 feet 10 inches each way, and has a small porch 10 feet 6 inches by 3 feet 9 inches. Its total height above the floor-level is 21 feet 6 inches. *It should be cleared of the sand which now conceals the plinth.*

30. *No. 41 A, Nakula and Shadeva's Rath* (see sketch).—Is a monolithic building with an apsidal termination. The whole, including the porch, measures 19 feet long by 11 feet 4 inches, and the height above the ground 20 feet.

* (*Nos. 39 and 43*).—Speaking of these Rathas, Mr. Fergusson says . " Although these two last-named Rathas are sufficiently interesting as examples of the patient labour which the Indians have at all times been prepared to spend on their religious edifices, their true value, in so far as the history of Indian architecture is concerned, lies in the fact that they are the only known specimens of a form of religious architecture which prevailed in the north of India for probably 1,000 years before they were commenced, and they are the incunabula of thousands of Hindu temples which were erected in the south of India during the 1,000 years that have elapsed since they were undertaken."

"The great interest of this Ratha," says Mr. Fergusson, "lies in the fact that it represents, on a small scale, the exterior of one of those Chaitya caves which form so important a feature in all the western groups, but all of which are interiors only, and not one so completely excavated as to enable us to judge of what the external appearance may have been of the constructed chaityas for which they were copied." *This building should be cleared of sand.*

31. *No. 42, Bhima's Ratha* (see sketch).—This is the largest in plan of the group of monolithic temples at Mahavallipur. It measures 48 feet 8 inches by 25 feet 9 inches, and is 26 feet high above the floor-level. It is interesting as representing the type of the early Buddhist halls; but being the copy of a wooden building, its excavated substructure was unequal to the support of the immense mass of material above, and a huge transverse crack occurred obliging the work to be abandoned. For this crack there is no remedy that I can think of; *the sand should be cleared away from around the monolith.*

32. *No. 43,* Dharmaraja's Ratha* (see sketch facing page 15).—Is the highest of the group, but, like everything else, is unfinished. In plan it measures 29 feet square and is 54 feet 9 inches high without *the finial, which has fallen down, and, if found, should be replaced.*

33. After the sand has been removed from the temples and monoliths Nos. 37 to 44, *it would protect the monuments to surround them with a substantial wall so as to prevent the sand from drifting back.*

Other Caves

34. *In the case of caves 44, 46, 48, 50, 51, and 52, means should be taken to prevent the interiors from being used as dwellings, cook-houses for fishermen, or cattle-sheds; and this can only be efficiently done by fencing round the entrances so as to prevent access to any but authorized persons.*

Quarrying.

35. Unless the areas, in which quarrying is to be limited, can be clearly defined by substantial walls, *it would be better to issue an absolute prohibition, which would be more likely to be strictly complied with than any partial restriction.*

Custody

36. *A native custodian should be always on the spot to prevent damage or maltreatment, and to ensure this three men would have to be appointed in order that a proper relief may be observed.*

Velur or Vellore.

37. Velur is reached *via* Arconum Junction by the Madras Railway, and is 80 miles from Madras. The town and fort are nearly 4 miles from the station. The fort, surrounded by a deep ditch, contains a most remarkable pagoda, which I visited on the 16th February 1881. It is dedicated to Siva, and consists of two rectangular enclosures, each with a *gopuram* or gateway. The outer gopuram has eight storeys, and is 100 feet high. On each side of the entrance are two *dwarpals*, or porters of blue granite. *The lower part of the gopuram is obscured by earth, the accumulation of which should be removed in order to make perfect what has been so well done to rescue the buildings inside the temple from maltreatment (see sketch).*

Kalyan Mandapam

38. The interior colonnades are picturesque and effective objects in themselves; but the gem of the whole place is a stone pavilion to the left as you enter through the gopuram from the outside. It is called the "Kalyan Mandapam," dating from A.D. 1350, and is a remarkably beautiful and elaborate edifice. The figure carvings,

which are most appropriately applied to pillars, plinths and ceilings, are, together with other ornaments, chiselled with the most consummate skill and effect.

39. The front row of columns—six in number—are monolithic, representing rearing horses, griffins, and elephants. The portico or antechamber has a wonderfully carved and painted ceiling of stone. Beyond this is the sculptured support for the idol.

40. This building, as well as all others in the pagoda enclosure, was, until quite recently, partitioned off, whitewashed and bricked up to suit the requirements of an arsenal store. Owing to an order of the Duke of Buckingham, this has all been remedied, and Captain McNeil Campbell, R.E., Executive Engineer at Velur, has most skilfully rescued the whole of the pagoda—removed tons of earth from the floors of the enclosures, pulled down all the unsightly partition walls, and cleaned the Kalyan Mandapam (see sketch) from top to toe of its unsightly whitewash. The place, with its marvellous sculptures, showing prodigious labor, is a complete study of Southern art, its restoration being a work of the most creditable kind. Captain Campbell has some plans showing what the arsenal enclosures were, and how they blocked up the pagoda corridors and buildings.

Late repairs.

Trichinopoly.

41. Trichinopoly is 252 miles distant by railway from Velur, and situated on the river Kaveri, about half a mile from its banks. The Muhammadans call it "Natar Nagar," from a saint "Natar," whose tomb still exists and is described further on. Trichinopoly possesses considerable historical interest, having played an important part in the war between the French and English; and the house below the great Trichinopoly rock in which Clive lived is still shown.

42. The principal monuments are—

(1) The rock, 236 feet high, and its temples.
(2) Teppa-kulam, or tank, at the foot of the rock.
(3) Fortified pagoda at Wyacundan Tirumali.
(4) Tomb known as "Chanda Sahib's."
(5) The Dar-ul-Umara, Palace of the Nawabs of the Carnatic and mosque.
(6) Tank where Bishop Heber was drowned.
(7) The great temple of Srirangam.
(8) The temple of Jambukeshwar.

43. I visited the above mentioned buildings at Trichinopoly on the 17th and 20th February in the order in which they are named. Mr. Sewell, the Collector, gave me every facility, and very kindly accompanied me to the buildings.

44. *No. 1, the rock of Trichinopoly and its temples.*—Previous to the order given in 1845 to demolish the ramparts, the rock formed the citadel of a large fort, one mile long by half a mile wide. Now the fortifications are demolished and only those of the rock remain.

45. To ascend, a very picturesque gallery has to be traversed with columns of grotesque carvings (*covered with whitewash, which should be removed*) (see sketch). Higher up is the *mandapam* or antechamber of a temple to Siva. The steps of the ascent caused a frightful disaster to a panic-stricken crowd of Hindu worshippers in 1849. Passing up higher still over steep steps cut on the rock is the temple to Ganesh on the summit. From the verandah a fine panoramic view may be had of the surrounding city and country, and its elevated position—some 236 feet—commands the plain for over 20 miles. The destructive influence on temples and

their approaches are dirt, whitewash, and leaky roofs; and until means are found to systematically clean out the offensive dirt, to remove all traces of the disfiguring whitewash, and to keep the roof secure against rain, this most picturesque spot will gradually lose its attractions.

46. *No. 2, the Teppa-kulam.*—At the foot of the rock to the west is a fine tank with steps down to the edge of the water. In the centre is a *mandapam* or pillared porch. The houses round the tank were once occupied by Europeans, and one is pointed out as having been Clive's residence.

The tank and its central mandapam should be kept in repair.

47. *No. 3, fortified pagoda at Wyacundan Tirumali* (see diagram).—Wyacundan is a village on the road between Trichinopoly and Alliturai, and about 3 miles from the former. The fortified pagoda in the village was occupied by the French in 1753, and recaptured by the British troops under Major Lawrence. The accompanying rough diagram, which I made in February last, shows the disposition of the walls and the position of the circular bastion, the raised terrace of which supports the various temples. The different gateways or *gôpurams* are covered with inscriptions which remain to be translated; but, as far as I am aware, nothing is known of the history and date of the buildings. The districts of Madura and Trichinopoly were constantly devastated by the incursions of the Muhammadans, and it is probably due to this that the pagoda was fortified and made a stronghold. The peculiar design renders the place specially interesting, and its more modern associations make it interesting, independent of its architecture; so that even if the elucidation of the inscriptions brings no fresh facts to light, the place is worth preserving. *A moderate sum would permit of the removal of destructive weeds and creepers, and of the eradication of whitewash from the masonry of the various structures.*

48. *No. 4, Chanda Sahib's tomb.*—The remains of Chanda Sahib (murdered in 1752 by Manikji, who commanded the Tanjore force in alliance with the English) are interred at the shrine of Natar Aulia. The tomb of this latter saint has the appearance of having been converted out of the materials of Hindu buildings, and may have been erected about the time of the invasion of Malik Kafur, who came from Delhi in A.D. 1310.

49. Be this as it may, Natar Aulia is a person of great local sanctity, and is said to have come from Constantinople many hundred years ago.

50. Chanda Sahib built the dome of the edifice. The railings round the two tombs in the building are of pierced metal-work of very singular design. *The buildings are somewhat looked after by the Muhammadans of the town, but greater attention is much wanted to ordinary repairs. The tomb and its surroundings are worthy of illustration as early examples of Mussalman architecture in Southern India.*

Illustrations required.

51. *No. 5, the Palace of the Nawabs of the Carnatic.*—The palaces and gardens at Trichinopoly [known as the "Dar-ul-Umara"] were built about A.D. 1660 by Choka Nayakkan, when he removed his capital from Madura to Trichinopoly.

52. The buildings and grounds became the property of the Nawabs of the Carnatic; but the estate was bought by Government in 1860, and is now in process of conversion into district offices. The more the palace buildings are utilised and occupied, the better chance will there be of preserving them and preventing their falling into complete ruin. The architecture is of a clumsy Saracenic kind, the plaster enrichments of the Audience Hall being the best features of the style.

53. The mosque near the palace was built after A.D. 1725, and is architecturally unremarkable compared with Saracenic buildings further north. *As an example of the Southern style, it is, however, worthy of better custody and keeping in order.*

54. *No. 6, the tank in which Bishop Heber was drowned.*—Near the house in which the Judge of Trichinopoly holds his court is a small open tank in which Bishop Heber was found dead on the 3rd April 1826.

55. *I would suggest that a brass tablet put up to mark the spot would be a fitting memorial.**

56. *No. 7, the Great Temple at Srirangam* (see diagram).—The following description of the temple at Srirangam is taken from Moore's *Manual of the Trichinopoly District*:—

"The entire mass of building consists of seven enclosures, in the centre of which is the shrine of the divinity known as *Ranganadaswami*. This shrine is surrounded by a wall measuring 245 feet by 180 feet; the second enclosure is 421 feet by 301 feet; and the third 759 feet by 510 feet. Europeans are not allowed to enter these enclosures. The fourth, in which is the 1,000-pillar mandapam, to which the great idol is brought every year at the great festival known as *Vaikunta Ekadesi*, measures 1,213 feet by 865 feet. Over the gates at the entrances to this enclosure are three gopurams, of which the eastern is the finest in the whole temple. It is known as the "*vellai*" or white gopuram, and is 146 feet 6 inches in height. There are altogether fifteen gopurams in the entire group of buildings. Of these there are four in each of the three outer walls and three in the one next in order. There is at present no gate or gopuram on the western side of this enclosure; but tradition states that there was a gate there formerly, but that it was blocked up because a number of the inhabitants of the portion of the town near it had entered through it and plundered the pagoda. The gate over which is the *vellai* gopuram leads into a yard to the south of the 1,000-pillar mandapam, in which the only respectable specimens of stone carving in the temple are to be found. Even these, however, are by no means remarkable, and are not for a moment to be compared with those in the great pagoda at Madura. During the annual festival, which has been already mentioned, this yard is covered by a *pandal* erected every year at a cost of about Rs. 3,000. * * * *

"Running round this (*fourth*) enclosure there is a street in which there are ordinary dwelling houses and shops. The fifth wall measures 1,610 feet by 1,307 feet. Outside is a second street, and then a wall of 2,100 feet in length by 1,845 feet in breadth. This wall is surrounded by a third street, and then comes the seventh and last wall, which measures 2,900 feet by 2,517 feet. This wall is built of fine cut stone, and is 20 feet 8 inches in height and 6 feet broad at the top."

57. Srirangam is over 4 miles from the Trichinopoly civil station, and is on an island formed by the Kaveri and Kolerun rivers. The sketch shows the appearance of the temple enclosures and gateways from the top of the unfinished gateway of gopuram to the south. The diagram explains the general disposition of the temple buildings; but nothing can be accurately or satisfactorily specified for the measures necessary to their preservation until a regular survey has been made of the whole area. For this purpose I intend sending a party of surveyors. In the meanwhile it may be useful to note the most interesting parts of the temple and what struck me as necessary at the time for their proper conservation.

Survey required.

58. The income reaches Rs. 60,000 a year, and out of this the cost of repairs could be afforded. The unfinished gopuram (A) measures 170 feet by 114 feet. The inner gate posts are each of a single slab of granite, 36 feet high and 6 feet

* Mr. Grant Duff has ordered the tank to be repaired and enclosed by a railing.

square. Had the gate been finished it would have risen to a height of about 300 feet. As far as it has got, the design is in excellent taste and well proportioned. Its completion would add enormously to the architectural appearance of Srirangam, and there are many rich native gentlemen who could well afford to bear the cost (see sketch).

59. *The vegetation which is damaging the masonry should at all events be removed, and the roof should be rendered secure against rain.*

60. The next object of interest is the gopuram (at B), which has a painted ceiling with the boar incarnation of Vishnu and other subjects. The colours are good, and should be preserved by cleaning and covering with a hard transparent varnish.

61. The mandapam (at C) is where the temple jewels are shown to visitors. Some of them are very fine specimens of goldsmith's work, and should be photographed. The 1,000-pillar mandapam (which, I think, is correctly placed at D) has columns of single blocks of granite, all more or less elaborately carved, and *the whitewash which covers them ought to be removed.*

Photographs wanted of the temple jewels.

62. The finest gopuram is that (at E) called the vellai gopuram. *With the exception of a few repairs, it is in fair condition.*

63. *The Temple of Jambukeshwar at Srirangam* (see diagram No. 8).—About 1¼ miles from the great temple to Vishnu is the pagoda sacred to Siva; and although much smaller, it far surpasses the larger building in beauty and architectural dignity. There are many inscriptions on the walls of the temple, one dated A.D. 1481-82, which, if correct, makes the edifices of much earlier date than supposed by Mr Fergusson. Until the archæology of Southern India has been scientifically investigated, the dates of buildings cannot be fixed with any degree of certainty, and there is nothing save the architectural styles from which to formulate chronological data.

64. The Trichinopoly Manual by Moore states that this pagoda had an endowment of 64 villages in 1750; but in 1851 an annual money allowance of Rs. 9,450 was given in lieu of the lands, and this sum is paid every year to the Trustees. The building is in many places much ruined and filthily kept; and, as Mr. Moore remarks, " the funds available for its maintenance would be quite sufficient to keep it in good order if they were devoted to their proper object; but this, it is needless to state, is not the case."

65. Mr. Fergusson, who visited Srirangam many years ago, writes: " One of the great charms of this temple when I visited it was its purity; neither whitewash nor red nor yellow paint had then sullied it, and the time stain on the warm coloured granite was all that relieved its monotony; but it sufficed, and it was a relief to contemplate it thus after some of the vulgarities I had seen. Now all this is altered. Like the pagodas at Ramisseram, and more so those at Madura, barbarous vulgarity has done its worst, and the traveller is only too fully justified in the contempt with which he speaks of these works of a great temple which have fallen into the hands of such unworthy successors."

66. I am not in a position to give an accurate description of the various measures necessary to preserve this building, and cannot do so until a survey has been made in detail; *but the place might easily be kept clean, and the whitewash should be removed from all sculptured masonry.* I was much struck with some of the *wooden gateways of the gopurams, which are handsome in design; but these have been greatly spoilt by being plastered over.* The proper way to preserve wood is to keep it clean with soap

Survey necessary.

and water, and to periodically oil with some vegetable oil and thoroughly rub dry, so as to prevent dust from collecting and caking on the surface.

Madura.

67. Madura is one of the most interesting places that I have been to in India. The peculiarities of Dravidian art are more marked here and more grotesquely elaborate than in any other Southern city that I know of. The great Hindu pagoda is a mass of picturesque gateways and temples; magnificent and grand in general effect; whilst their stone sculptures are unsurpassed for finish and marvellous elaboration. This cannot fail to be the impression produced on every attentive spectator. The temple buildings are, moreover, not deserted like so many of their class throughout India, but are at all hours thronged with Brahmins, worshippers, buyers, and sellers: in this respect rivalling the busy religious spectacles which rapidly succeed one another at Benares.

68. The activity of Hinduism, both in its religious and artistic aspects, is of the first interest at Madura. A secondary feature of the place is the architectural style of its place.

69. "The civil buildings," writes Mr. Fergusson, "are all in what we would call a pointed arched Moorish style, picturesque in effect, if not always in the best taste, and using the arch everywhere and for every purpose." In the temples the arch is never used as an architectural feature. The distinction between the civil and religious art kept up at Madura, as elsewhere, by the Dravidians is very singular and interesting to study. My visit in February last was unfortunately far too short to permit of sufficient examination of the buildings; but before making a survey on which to base detailed recommendations for conservation, it will be of some value to briefly record what I did see and what are in my opinion the more simple and obvious remedies.

70. Mr. Stokes, the Collector, afforded me every facility for visiting the temples and palaces; and without his help it would have been difficult to see everything in the time at my disposal.

71. *The great temple at Madura* (see diagram).—The invasion in A.D. 1310 of Southern India by Malik Kafur caused the overthrow of the original temple, built probably some centuries before Christ.

72. The present edifices were for the most part built by Trimal Nayakka in the first half of the seventeenth century. The enclosure is a rectangle, measuring 869 feet long by 747 feet wide. The diagram gives an idea of the various parts of the building. There are two temples in the centre—one dedicated to Siva, *i.e.*, called Sundereshwar, and one to "Minakshi," the fish-eyed goddess, the consort of Siva. These sanctuaries are said to date from A.D. 1520, but the more magnificent buildings are of Trimal Nayakka's time.

73. The enclosure possesses four large gopurams or gateways and six of less importance; a beautiful tank called the Potramara-culam (*i.e.*, for the purpose of drawing a *teppam* or lighted raft in procession round it), surrounded by a handsome colonnade; and a hall of 1,000 pillars with sculptures of singular merit unequalled elsewhere in India.

74. Some of the figures carved against the pillars are not only spirited in action, but of superior rendering. *The whitewash now on them should be removed at any cost.* Outside the principal enclosure of the temple to the east is the hall or mandapam built by Trimal Nayakka for the reception of the deity of the Temple (see B). It measures 321 feet long by 79 feet wide, and consists of four ranges

of columns, all most elaborately sculptured and some with rampant "*Yalis,*" or monsters, and others with human figures (see sketch). *Detailed illustrations would be valuable.*

The effigy of Trimal Nayakka is in the central corridor, with a canopy over it: the figure is brilliantly painted. At one end of the central corridor is a handsome black basaltic stone canopy. *The hall is used as a market, and is very dirty and neglected. It should be cleared out, cleaned, whitewash removed from pillars, and the roof and parapet repaired.* At the east end of the hall is a gateway commenced by Trimal Nayakka (see A), but never finished; it measures 171 feet by 107 feet, and if completed would have been the most important gopuram in Southern India.

Illustrations wanted.

75. The great gopuram (see sketch and C in diagram), which is the principal entrance to the temple, has an elaborately carved stone base, and a superstructure of masonry and plaster, nine storeys in height, covered with the most intricate ornaments and figures.

76. The plaster is painted in brilliant colours, but at a distance the general tone is neutral, and not by any means inharmonious.

77. The entrance to "Minakshi's" temple is to the south of this gate, and its elaborately painted façade of plaster ornamentation and figures is a most picturesque object, although grotesque in detail. Between the two gateways is a row of braziers' shops, where brass vessels of excellent shapes are made.

78. The wooden doorways of the great gopuram (C) and of other entrances to the temple are handsomely carved, and the wood-work should be preserved by cleaning and oiling. The two entrances of the temples (at G and H) have archways of brass handsomely designed for the reception of numerous candles.

79. The carved stone figures in Sundareshwar's temple (at K) are larger than life and spirited. *They require keeping clean.*

The wall (L M) at the back of the two temples is covered with inscriptions.

80. The colonnade of the tank (at E) is brilliantly painted, and there are some representations of the most famous Indian pagodas.

81. Near the mandapam now used as a bazaar (at O) is a black stone with inscriptions.

82. *The pagoda is very wealthy; has an endowment from Government, and receives frequent gifts of great value from its worshippers. Repairs were going on during my visit, and the place is evidently cared for and much money spent in renovations; but the halls should be kept clean and the carved pillars and ceilings should be freed of whitewash. Until this is done, no wealth of gifts spent in painting the exteriors of the various gopurams will prevent the deterioration of the singular artistic merit of this wonderful pagoda.*

83. *The temple jewels, which are of considerable value, should be photographed.*

84. *The Teppa-kulam Tank.*—This tank measures 995 feet long by 742 feet broad, and has a central garden, with a *vimanah* in the centre and four pavilions at the corners. The wall which fences in the tank is much defaced by stripes of red and white colour.

85. *Trimal Nayakka's Palace.*—About one and a half miles from the station is the Palace of Trimal Nayakka. He came to the throne in A.D. 1623, and

reigned thirty-six years, during which time he built the Madura pagoda and palaces.

86. The diagram will give some general idea of the arrangements of the latter, although it has no pretensions to accuracy. The sketch shows the interior courtyard and its surrounding arcades.

87. Passing through the portico erected to Lord Napier on the east side, the quadrangle is entered. The pillars which carry the arches are of masonry, and the foliated brick arches are of chunam. The wagon loft seen in front (see sketch) has been repaired under Mr. Chisholm, and the whole of the buildings are gradually being restored to serve as offices for the Judge and Collector; but unless more rapid progress is made, the ruined portions of the buildings stand a very fair chance of coming down altogether.

88. The height of the massive columns gives great dignity to the building, and the plaster enrichments, both inside and outside, are very remarkable and effective specimens of their class.

89. It is difficult to believe that the grotesque and elaborate architecture of the pagoda, and the plain and almost classical treatment of the palace buildings, are of one period and erected by the same man.

Illustrations wanted.

90. *Details are wanted of the latter, which are fine examples showing the influence of Mussalman art on the indigenous architecture of the South.*

91. *The Tamkam.*—The "Tamkam" is a palace building of the same period erected for wild beast fights. It is now transformed into a residence: but the interest which attaches to its original use is sufficient reason for keeping it in substantial repair.

Tanjore.

92. *The Great Pagoda.*—I am indebted to Mr. E. Forster Webster, the Collector, for very valuable aid and assistance during my stay at Tanjore, which enabled me to see in a short time the buildings here noted on.

93. Tanjore is 31 miles from Trichinopoly by the South Indian Railway, and is the head-quarters of the richest Collectorate in Southern India. It became the capital of the Chola Kings, who were powerful in Tanjore, several centuries ago, and a very remarkable temple was erected by these rulers.

94. "The great temple of Tanjore," writes Dr. Burnell in his pamphlet, "is really the most remarkable of all the temples in the extreme south of India; is one of the oldest; and as it has been preserved with little alteration, if not perhaps the largest, it is the best specimen of the style of architecture peculiar to India south of Madras. This style arose under the Chola (or Tanjore) Kings in the 11th century A.D., when nearly all the great temples to Siva in Southern India were built, and it continued in use in the 12th and 13th centuries, during which time the great temples to Vishnu were erected. Up to the beginning of the 16th century these temples remained almost unchanged; but at that time all Southern India became subject to the Kings of Vijayanagara, and one of these, named Krishnaraya (A.D. 1509-30), rebuilt or added to most of the great buildings of the South. The chief feature of the architecture of this later period is the construction of the enormous gopurams which are so conspicuous at Conjeveram,

Chedambram, and Srirangam. All these were built by Krishnaraya; they do not form part of the original south-east style, but were intended as fortifications to protect the shrines from foreign invaders and certain plunder and desecration, as the Hindus of the south-east first discovered on the Muhammadan invasion of A.D. 1310. * * * * * *

" To the archæologist the temple and its ritual are of little interest compared with the inscriptions which cover the walls. A part of these* was photographed in 1859 by order of Sir C. Trevelyan and published by the Government, but without result. In 1871 I made out the character, and the whole has been copied, under my direction, by a learned Tamil scholar, Madura Muthai Pillai, whose transcript will shortly be published. Nearly all of these inscriptions—there are only two or three of a later date—belong to the reign of Vira Chola, or from A.D. 1064 to 1114.

* * * * *

" The whole of India, which in the 11th century remained subject to Hindu kings, then became subject to Vira Chola, and he was, beyond doubt, the greatest Hindu king known to history. As these inscriptions state, he did not spare the kings he conquered; and the enormous plunder which he gained became the chief means of building and endowing the great temples of the South."

95. The services of the great Tanjore temple are conducted on a modest scale, since it has lost its large revenues, and it is dependent on the Princess of Tanjore, who provides an annual sum of Rs. 12,000 for maintenance and repair.

96. The plan of the pagoda has greater stateliness and propriety than seen in other Madras buildings of that class, and the appearance of the various edifices is not marred by being too close together.

97. On entering through the two gateways at the east end of the enclosure (see diagram) there is a small temple (C) where sacrifices are offered. A great deal of whitewash and paint disfigures the stonework. The great bull Nandi, in solid granite, over 12 feet high, is directly in front and covered by a mandapam, the masonry of which has been rudely painted in yellow and red, which is offensive. Further west is the great Vimana containing the lingam, and its tower, 200 feet high, stands out well against the sky (see sketch). The base of the building is covered with inscriptions in the old Tamil of the 11th century, and one of them records the conquest by Vira Chola of Bengal and Northern India. Frequent repairs have been executed to the temple and its great tower, *but it stands in need of being cleaned of the stripes of paint that damage the plinth.*

98. To the north-west of the enclosure (at D) is the beautiful temple to Subrahmanya (see sketch); the base of the tower is 45 feet square, and the superstructure 55 feet high. The pilaster and pillar treatment of the façades is as good as possible, deserving detailed illustration. East of the tower is a building 50 feet long and a mandapam beyond, 50 feet square. This latter is partitioned up for storing temple furniture, and on the walls are a series of paintings of the Tânjore Rajas. Dr. Burnell considers the building to be about 350 years old. East of the Subrahmanya shrine is a Chandikasan temple (H), and further east a small temple to Durga. In the south-west corner of the enclosure is an unimportant temple to Ganesa. The colonnade of the outer wall has 108 lingams and shrines, and the inner walls were in 1875 painted in fresco to represent the various incarnations of Sundereshwar, the form Siva took at Madura.

Illustrations wanted.

99. *I recommend the eradication of all whitewash from the buildings, that their roofs be kept in substantial repair, and that the mandapam to the Subrahmanya temple be cleared out and left as originally designed. Illustrations of the temple would be valuable.*

100. *The Tanjore Palace.*—The palace of the Princess of Tanjore stands in the greater fort, and is a mass of masonry not very different in style from the Madura palace, but commoner and more vulgar. The Durbar hall is a most grotesque rendering of Hindu and Muhammadan architectural features, and, if not beautiful, is a curious example of the civil architecture of the Mahratta rulers, and should be preserved. There is a statue in white marble, by Chantrey, of Sharfoji, the last Raja but one. The court round the hall is decorated with black and white ornament resembling Italian Sgraffito work, and on one side is the library which contains an unique and valuable collection of Sanscrit manuscripts, of which Dr. Burnell has made the catalogue. Among them are works on architecture or "shilpishastras," a translation of which would be a most valuable contribution to Indian art.

101. The Mahratta hall of the palace was under repair during my visit. The interior is painted brilliantly, and there is some coloured statuary in the upper part, which is well executed, although not in the best taste. *Plans and illustrations of the palace buildings would be interesting.*

Illustrations required.

Kombakonum.*

102. Kombakonum is a town in the district of Tanjore and possesses two important Hindu temples. The larger of the two is dedicated to Vishnu and the smaller one to Siva; both buildings are in the centre of the town, about a mile from the railway station on the South Indian Railway. There is a third pagoda of less importance.

103. *Vishnu Pagoda.*—The Vishnu temple has a great gopuram of 12 storeys and 147 feet high, richly ornamented with human and animal figures. Near this is a small porch and two processional cars of carved wood and intricate in design. One is of great size and elaboration. The ceiling of the gopuram of the temple is well painted and pleasant in tone. The interior buildings are nothing remarkable. The inner court measures 88 feet 6 inches by 55 feet 6 inches, *and, besides having offensive odours, is liberally treated with red and white paint, against which the voice of local authority might with propriety be raised.*

104. *Siva Pagoda.*—The temple to Siva, called the Kumbheshwara pagoda is approached by a corridor, 330 feet long and 15 feet wide. There are shops on both sides, and this gallery is the most singular feature of the place. The principal gopuram is 128 feet high, and leads to a court 83 feet by 55 feet. This is very dirtily kept, and the vimanah bricked up and plastered. Outside the temple are four wooden cars, all more or less covered with carvings in wood. These cars are singular forms of native religious art, and the carvings are very good of their kind. Unfortunately, and in too many instances, the beauty of the carving is utterly destroyed by coatings of oil, which with dust coagulates and forms a hard and hideous coating. A copy of one of these temple cars would be a valuable addition to the India collections at South Kensington.

* The Honourable Amaravati Seshya Sastri, C.S.I., who resides at Kombakonum, takes great interest in the ancient Madras architecture, and I had a long and most profitable conversation with him. He pointed out how the Shastras enjoin Hindus to attend to the seven charities or Dharmas of (1) temple-building, (2) foundation of Brahmin villages, (3) tank excavation, (4) well-sinking, (5) plantation of shady groves, (6) erection of drinking fountains, (7) building of "Chattrams" for the free distribution of food to travellers.

105. The Ramaswamy temple has only one gopuram leading into the enclosure. The columns of a mandapam here are massive and well carved. *The usual whitewash and plentiful rubbish and dirt defile the place.*

106. *The wooden gateway of the entrance gopuram is handsomely carved, and the only remaining half of it is worth preserving by repair, cleaning, and oiling.*

Chillambaram.

107. *Pagoda.*—Chillambaram in South Arcot on the South Indian Railway has a pagoda of considerable antiquity and interest.

108. It covers an area of 39 acres in the centre of the town, and is the property of a class of Brahmins called Dikshatars. The South Arcot Manual by Mr. Garstin, of the Madras Civil Service, says that in 1878 there were 253 married members of the institution who were on duty, twenty at a time, and each batch stays on duty for twenty days until each has performed service at the various shrines. These Dikshatars go in turn into the country to collect alms and wander over the whole of Southern India. The pagoda possesses no landed endowments, but money seems forthcoming, and I was told that nearly two lakhs of rupees had been promised for repairs. In A.D. 1785 a widow is said to have spent two lakhs in repairing the gopurams after the French occupation and partial fortification. The pagoda has a reputation for great antiquity, some authorities going so far back as the 5th century; but from the style the greater part of the buildings dates from the 15th to the 16th century A.D.

109. The sketch diagram explains the disposition of the various buildings which are within the enclosure.

110. The principal temple to Siva (at A) is nothing very remarkable. The treasury, which is within the second enclosure, has some fine wooden carvings under the eaves of the copper roof. The Govindah temple is also here with its mandapam, which, like everything else worth looking at, is whitewashed and therefore defaced.

111. At the back wall of the temple is an inscription in Sanscrit. The 1,000 pillar mandapam (at B) has some fine and massive monolithic pillars about 2 feet square in section and 14 feet high. Some of these are unfinished and some damaged. The roof over the centre nave of pillars is vaulted and full of bats, the floor below being black with their dung.

112. The temple to Subrahmanya (at C) has the best carvings, and its colonnade is most elaborate. The stone-work is said to have been much mutilated by Hyder Ali when his troops were in occupation.

113. The large elephants on each side of the entrance steps are carved in a spirited way. The columns of the temple, which are well worth drawing, are partly disfigured by plaster. The interior has a vaulted roof. Repairs have to a certain extent been executed, but the courtyard of the temple is still strewn with broken fragments of carved masonry *which should be collected and displayed* (see sketch).

114. The temple of Parvati (at D) has a colonnade or porch of handsome pillars, but whitewash spoils the effect of the carvings, and damp has discoloured the *painted ceilings. The inner temple is much defaced, and full of bats and dirt. Cleaning would do great good here, and dirt and whitewash should be removed. The roof too should be made proof against rain.*

115. The west gopuram (at E) is architecturally the least important (see sketch). It has an inscribed stone in the entrance. The gopuram to the east

(at G) is the highest and best preserved. Outside this are five carved wooden cars, finely designed and executed; one is said to have cost Rs. 4,000.

116. The north gopuram (at H) is the second *in size. Vegetation is at work on the lower part, and ought to be removed and damage stopped.*

117. The niches in the basement have figures in black stone well sculptured. The upper part of the structure is of brick and much ruined. Inside the entrance is a fine monolith with inscriptions.

Conjeveram.

118. Conjeveram is a place of very considerable interest, but not frequently visited, as there is no accommodation in the town for Europeans. It is on the South Indian Railway between Chingleput and Arkonum, and 45 miles south-west of Madras itself.

119. *Siva Temple.*—The largest temple of the town is dedicated to Siva, and the object of worship a lingam (see sketch). It is probably the oldest building in the place; but the ancient history of Conjeveram requires investigation.

120. The enclosure possesses some large gopurams, several mandapams and a hall of 1,000 pillars.

121. Two handsome porches are in front of the great gopuram—the doorway of which is handsome and big. Repairs were going on here during my visit, but the institution is not wealthy, having only about Rs. 2,000 annually from Government and villages. The 1,000-pillar mandapam has all the appearance of antiquity, and its ceilings appear to have been handsomely painted, but the damp coming through the roof has caused obliteration.

122. One portion of the building is enclosed for the reception of the temple vehicles and is full of bats. Between the vimanah and the great gopuram is a very old building covered with inscriptions called the Kachimayavam, and is entirely of stone.

123. The pagoda has often suffered through the exigencies of warfare, and has been used in the Carnatic campaigns as a barrack, as a fort, and as a hospital.

Survey necessary.

124. *It will be necessary to carefully survey the building for repairs; but the inevitable whitewash which abounds with streaks of red paint might be instantly removed with great advantage.*

125. *Vishnu Temple.*—The smaller temple dedicated to Vishnu is the richest and most important institution in Conjeveram. It has two enclosures, the inner one being closed to Europeans and unbelievers.

126. The buildings are about 2 miles from the Tehsildar's office, and are approached through a street lined with the houses of Brahmins connected with the temple. Most of the dwellings have wooden doorways singularly well carved, and the inmates show great skill in tracing chalk patterns in front of the temple gate, as well as before their own doors. These tracings are renewed every day, and the patterns are varied and drawn in free hand.

127. The first gopuram is severe in outline and is not plastered over with figures of Hindu mythology. It has a number of inscriptions. Beyond is the 100-pillar mandapam, which is a fine group of masonry sculptures (see sketch). Some were damaged by shot in Hyder Ali's time, but the bases of all the columns are coated with whitewash and paint, which utterly hides the delicacy of the carving.

The whitewash should be removed and the roof made quite secure against rain. At the corner of the eaves are chains wrought out of the solid stone.

128. There is a second mandapam north of this; also a *Teppa-kulam* or tank. The vimanah itself has some fine masonry sculptures; none but Hindus are allowed inside. The gopuram to the east is a fine pile with a few figures on it.

129. The temple jewels are shown near the vimanah to visitors, and are very interesting specimens of goldsmith's art. The total value of the jewels as estimated by the priests is Rs. 1,06,935; among these is a necklace valued at Rs. 3,682 given by Lord Clive. There are some fine solid gold head ornaments for the various idols. *The jewels should all be photographed. Outside the temple is a very fine carved wooden processional car, also worth photographing.*

Photographs wanted of temple jewels.

130. The income of the institution consists of a revenue from lands of Rs. 3,000, and an annual Government payment in lieu of resumed fees of Rs. 9,961.

131. *It will be necessary to carefully survey this pagoda both for repairs and for its interesting architecture and ornaments; but a great deal of preliminary good may be done by cleaning, repairing leaky roofs, and removal of whitewash.*

Survey necessary

132. *Jaina Temple.*—About 2 miles south of Conjeveram in the hamlet of Tiruparath Kundram is a *Jaina temple*, in which service is still conducted, although in a humble way. The Vijayanagar Kings made grants of land to this temple during the 11th to 16th centuries, as may be seen from the inscriptions; but the Jaina sect is now reduced to 258 in the whole of the Chingleput district. The temple buildings should be carefully surveyed, as they have all the appearance of having been originally Buddhist, and possess artistic beauty of their own. The outline of the buildings bear some resemblance to the Rathas at Mahavallipur (Seven Pagodas) (see diagram).

Survey required.

Bijanagar and Hampi.

133. *Bijanagar Ruins.*—The distance from Bellary (on the Madras Railway) to Bijanagar is 34 miles, and the road is a mere track across a rough country. The travellers' rest-house at Kamalapur is an old temple which has been converted for the purpose.

134. The foundation of the Bijanagar monarchy dates from the middle of the 14th century. The city was built on the right or southern bank of the river Tangabhadra in a plain partly open to the east and west, but to the north-east bounded by a wild and fantastic group of rocks and hills rising to a considerable height, the northern faces of which are almost inaccessible, and which left only a confined space between them and the river. The enciente of the fortifications covered scarcely less than ten square miles.*

135. The plan of the ruined city is taken from one published in Meadows Taylor and Fergusson's book; but a more detailed survey should be made in order to determine what monuments are worth preserving and what measures are possible.

Survey wanted.

136. My visit was made in March last, and Mr. Huntley Gordon, the Collector of Bellary, very courteously accompanied me over the ruins and facilitated my inspection of the principal buildings. The buildings are noted on in the order in which we visited them.

* See *Architecture in Dharwar and Mysore* by Meadows Taylor and Fergusson :—John Murray, 1866.

137. *Elephant stables* (D on the plan).—These consist of a long row of chambers domed over, the centre one having a double storey over it. The architecture is of the mixed Hindu and Muhammadan style, and in this building is less objectionable than in other buildings of the same style at Bijanagar The masonry is much ruined, and creepers and vegetation should be removed from the roof. *The interior should be cleaned out, and the building placed in charge of a custodian to prevent misuse and damage.*

Bijanagar.

138. *Palace Buildings.*—Near the elephant stables and to the west is an enclosure with a high masonry wall. The buildings are of a form which arose from the influence produced by Muhammadan power and magnificence on the minds of the Hindus, inducing them to copy in their palaces—never in their temples—the more splendid form of palatial architecture.

139. The use of the moslem arch in the central pavilion is clumsy and heavy, but the plaster enrichments somewhat redeem the general effect, and are worthy *of illustration. The removal of weeds and overgrowth would do much good here, and the place should be in custody.*

Illustrations required.

140. *Temple of Victory* (see C on plan).—About 800 yards to the south-west of the palace buildings is a temple in a quadrangle, 110 feet from north to south and 200 feet from east to west. The bas-reliefs on the exterior of the walls are singularly characteristic, and long rows of horses, elephants, camels, soldiers, spirited dancing women, &c., may have led to the name given to the building. The adytum of the interior is supported on four most elaborately carved black basaltic columns, and the ornaments, *which should be illustrated,* are both bold and rich. On the plinth of one of the gateways is an inscription in old Kanarese. The walls of the enclosure are covered with sculptured chariots and sharply-cut medallions and figures *well worth photographing. This temple should be preserved and further ruin stopped by propping up the dangerous blocks of masonry, by clearing away jungle and eradicating roots in the masonry joints, and by cleaning up and watching.*

Illustrations required.

141. *The Throne* (see B on plan).—This consists of a succession of platforms, the outer walls of which are carved in relief with elephants, camels, dancing girls. It is about 600 yards south of the palace buildings. The total height of the platform is 31 feet, and there are signs on its summit of a pavilion having existed. Inside this mound is a staircase which is partly blocked up. It goes by the name of "Mahavimi Dibba" or "Dussera Dibba." About 150 yards to the south-east of this is the building and tank known as the

142. *Queens' Baths* (see A on the plan and sketch).—It is 78 feet 5 inches square in plan, with a reservoir in the centre 50 feet 9 inches square and 6 feet deep. The corridor of the building has an arched ceiling richly carved with foliated ornament in plaster, and over the bath on each of the four sides is a projecting window with three openings. The plaster and masonry is much damaged; *but if the roof is rendered waterproof, the building will be a good deal preserved from further damage and ruin.*

143. *Malavanta Ragananthswami Temple* (see E on plan).—This is about 1½ miles north-east of the travellers' rest-house, and stands in a walled enclosure on a rocky hill. There are three gopurams of the usual Dravidian style of architecture. A mandapam inside is the best architectural feature of the place, and is very picturesque with its carved masonry columns. It is roofed over with enormous stone beams, *and the roof requires to be made water-tight. On one side of the building is*

a great mass of débris which should be removed in order to clear the plinth. All vegetation should be removed from the roof and the interior cleaned up. One of the temples in the enclosure has a seated figure, probably Jain. The Duke of Buckingham has recorded some wise directions for the preservation of this temple. He says in his note on Hampi :—

144. "This course should be adopted also at the Malyavanta Raganathswami Temple, where the surrounding wall gives great facility for its preservation. Worship by pilgrims should in no way be interfered with, but those practices which are no part of religious ceremonies or worship, and by which irreparable injury is done, should be rigidly interdicted, and the interdiction enforced. The principal injurious practices are lighting fires, treasure seeking, and the building up in all sorts of ways of cells and shelter walls in the interior of temples and gateways, &c. These are done to make shelter from wind for pilgrims and for cattle. They are constructed of mud and of the stones which are nearest to the hand, regardless of what they are of, or the damage which their weight may cause to the carving on which they are laid, or into the recesses of which they are placed and wedged. I had a large number of those shelters cleared away in my presence from the Raganathswami temple before any photographs could be taken, and then released the mischief so caused.

145. "On the third morning I again visited the Malyavanta Raganathswami Pagoda and Mahanavami Dibba, at which latter I arranged to have the earth and rubbish so far removed from the decorated walls of the stairs as to expose the whole of the carvings for the photographer. * *

146. "I also visited the Pattabhi Ramaswami Pagoda. It has been defiled and the image removed, but is a large and massive structure with good carving and curious from its enclosing wall being lined internally with a double tier of granite built cells, of which a large portion is uninjured. The enclosing wall of this has never been breached, and affords, therefore, great facility for preserving this relic, of which the roof is all but entire, from further injury. Like all others it has become a refuge for goats and cattle, but appears for some reason not to have been a favourite resort of pilgrim worshippers, and has thus escaped the damaging effect of their cooking fires."

147. *Temple of Vittala* (see F on plan and diagram).—Speaking of this, Mr. Fergusson writes:—

"By far the finest example of the Dravidian style in this province is the porch of the unfinished temple of Vithoba* at Bijanagar. In some respects it is as remarkable a specimen as any to be found in Southern India, though far less in extent than those at Rameswaram, Srirangam and Chillambaram. Like all the rest it is wholly of granite, and in the most monolithic style, each of the great piers supporting the roof being composed of one block, from which the slender detached shafts were separated by under-cutting after they were placed *in situ*. The car, too, of the god is composed of only one stone, most probably a boulder found on the spot, for it is scarcely probable that so large a stone could have been moved to the place where it is now found.

"With regard to the date, there does not seem to be any doubt, but that the local tradition is correct, which ascribes the erection of this porch to Achut Raya I, or more probably to the usurper Ramraj during his tenure of power.

"This would place it between the years 1530 and 1542, which from other circumstance seems to be extremely probable as its date."

148. The three temples stand in an enclosure which has four low gopurams—a stone rath or car close to the temple on the right as you enter the enclosure, and two stone pavilions for lodging travellers (see sketch).

149. The principal temple is much ruined—some say by Tippu Sultan—and its present condition is most critical. *The standing portions of the roof should be rendered secure ;* but I think that any actual restoration would be difficult as well as costly. *Jungle should be cleared from the whole enclosure, and destroyed where it has obtained a hold in the masonry. The carved fragments should be collected so as to be well seen, and the various plinths of the building should be freed of earth and débris.*

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* This is a misnomer ; it should be "Vittala."

150. Speaking of the Vittalaswami Pagoda, the Duke of Buckingham, who visited Hampi last year, records the following :—

151. "Vittalaswami Pagoda itself is a marvel of industry in carving, and beautiful both in outline and detail, although the carving is not as a whole worked to the finished surface of the monoliths of Madura or Vellore. The delicacy of the columns in their several groups surpasses any work I have yet seen (see sketch). It is much to be lamented that this graceful structure has been so much injured, and that so large a portion has fallen. The injuries appear to me mainly due to treasure-seekers and to pilgrims. The former have in many cases undermined the basements, and the latter by lighting fires for cooking against the pillars have caused the granite to flake, and this process has been constantly repeated until the pillars have become too frail for the support of the massive granite in posts and slabs of the roof. I think that measures should be taken to preserve these relics of a bygone age from further damage, and that the Collector should be authorised to employ a pensioner or other competent man at a small salary to prevent fires being lit within this temple, or any digging for treasure or stone within the precincts of the temple, or the stalling of cattle in it, and should take measures at the large annual gatherings to prevent injury."

152. *The pagoda at Hampi* (see G on the plan)—Is approached through the Pilgrims' or Kashin Bazar. Excepting during festivals, these dwellings are deserted; but they form an impressive example of street architecture, and are worthy of illustration.

Illustrations wanted.

153. The temple has but one enclosure and two gateways. The design is attributed to one of the Bijanagar Rajas, Krishna Rai, who in the 15th century returned from the conquest of the Chola Rajas of Conjeveram and built the edifice out of the booty which he brought back. The lateral gopuram to the north is a fine pile, and was repaired by Mr. Robertson, when Collector of Bellary, at a cost of Rs. 36,000. The door to the vimanah has some handsome brass-work with hammered ornament, worthy of illustration.

154. *Jain Temples.*—Above the pagoda on the slope of the hill are some peculiar temples of the Jaina style, *and they should be cleaned out and kept in custody.*

155. These recommendations are preliminary only; and as I have said, a detailed survey should be made, so that more comprehensive measures may be specified for the consideration of Government.

Note on Works undertaken in Madras, dated 18th September 1882.

Madura.—As already mentioned (see page 8, paragraph 37), Lord Napier first suggested the restoration of Trimal Nayyaka's Palace at Madura, and its utilization for public offices. Mr. Chisholm, Consulting Architect to the Madras Government, has since 1869 had charge of the work which is now approaching completion. The total estimate is Rs. 1,50,000. Mr. Chisholm is about to put his drawings of the palace in a shape suitable for publication, and I hope before long to have them reproduced.

Trimal Nayyaka's Palace.

Vellore.—The idea of restoring the beautiful temple in the Vellore Fort was initiated in 1878 by His Grace the Duke of Buckingham, and has been carried out most successfully by Captain McNeil Campbell, R.E., at a cost of about Rs. 3,400.

Temple in the Vellore Fort.

Seven Pagodas.—The seven pagodas at Mahavallipur, described in my report of the 23rd June 1881, have received a certain amount of attention, an estimate for Rs. 1,190 having received the sanction of the late Mr. Adam on the 12th April 1881. More, however, remains to be done.

Mahavallipur.

Amravati Tope.—These most interesting remains, which have been described at length in Mr. Fergusson's work on "Tree and Serpent" worship, and by Mr. Sewell in his "Report on the Amravati Tope" published in 1880, are situated 18 miles up the Kistna river from Bezwada. Excavations were undertaken by Mr. Sewell in 1877, when 80 hitherto undiscovered marbles were laid bare. Subsequently the Duke of Buckingham visited Amravati, and in 1880 ordered the complete excavation of the place. Since then Dr. Burgess has been to the tope, and in January 1882 packed up all the excavated marbles, hoping to remove them to Madras. I am now about to inspect the locality with the view of preserving these valuable remains *in situ, if possible.*

Undavilli Cave Temple.—This cave temple, which is in the Kistna district, was cleared by Mr. Sewell in 1877 of the accumulated débris of ages.

Old Monuments and Temples in the Fort at Gingi.—In 1872-73 a sum of Rs. 500 was spent in removing brushwood, cutting down trees from the walls and roofs of the buildings, and extracting roots. In 1874-75 an annual grant of Rs. 200 was sanctioned for the preservation of the ruins. In 1878 a special grant of Rs. 250 was sanctioned for improving the access to the hill on which the fort stands.

Gingi Fort.

In 1880 Mr. Chisholm, the Consulting Architect to the Madras Government, submitted a report on the Gingi remains, and wished to remove some of the pillars of a temple to be utilised in building the Madras Post and Telegraph Offices, but Government declined to sanction the removal of any of the architectural remains.

Bijanagar—These fine remains, known as the "Hampi ruins," are described in my Report of 23rd June 1881.

In 1878 a small sum was authorised for the removal of banyan trees which were destroying the buildings. After inspection in 1880 the Duke of Buckingham called for estimates for protecting the temples, and in May 1881 a grant of Rs. 200 was made for clearing away encroaching vegetation.

The Governor of Madras, Mr. Grant Duff, visited Hampi in July last, and more comprehensive measures are now about to be undertaken to repair the various structures.

Surveys have been made during December to July 1882 of Srirangam, Madura, and Ramisseram. The plans and photographs now in course of reproduction show what, I think, is required to preserve the buildings surrounding the great temples at those places.

P

Report on Monuments in Bombay, together with a Note on Works undertaken.

Bijapur.

General description of Bijapur and present condition of its buildings, together with some recommendations for their preservation, and Report on the project for making the city the head-quarters of the Kaladgi District, dated 17th June 1881.

Journey to Bijapur.

The journey to Bijapur from the Great Indian Peninsula Railway at Sholapur is neither easy nor comfortable. The road is but a made track, and there are no bridges over the Bhima and Sina rivers. A two-wheeled cart or "bandy" is under favorable arrangements drawn by trotting bullocks, and these go at a maximum rate of 4 miles an hour; but allowing for delays in changing at the various stages, for accidents, and for the occasional excursion of a wilful pair of animals, cart and all, into the middle of a field, the journey of 61 miles is accomplished in 20 hours. Fortunately, for the future of Bijapur, and for the comfort of those who have to go there, the railway from Sholapur is, I understand, now sanctioned, and the embankments were completed as a relief work during the famine of 1876-77.

Bijapur City.

2. The name "Bijapur" is said to be derived from "Vijyapur" or "City of Victory," which was a Hindu centre of some size and importance when the Muhammadan invasions of the Dekhan brought a band of fanatics, who attacked the Brahmins of the City College (the remains of which may be still seen in the citadel), and established themselves in it. This early occupation of the city had, as far as it is known, no immediate effect on the place, nor did it produce changes. It was not until Yusuf Adil Khan in A.D. 1489 assumed independence that the site of the old Hindu town was selected for the new citadel and the surrounding fortifications were built. The former is over a mile in circumference, and has a stone parapet and ditch. The latter consist of massive masonry walls and bastions, the circuit being about 6¼ miles.

The plan of Bijapur, attached to this report, is taken from that published in Taylor and Fergusson's volume, and shows the position of the most important monumental buildings. The second plan is annexed more as a curiosity than anything else. It was copied from an old map by a native of Bijapur, who accompanied me round the city, and it gives some idea of the character of the existing edifices and where they are, in and outside the city walls. The sketches are from Colonel Biggs' photographs: and I am indebted to Sir Charles Macgregor, Quarter Master General, and Captain Bell for the permission given for the reproduction of the plates at the Office of the Intelligence Branch, Army Head Quarters.

For some distance all round, the country consists of undulating downs, covered with a stony soil. In the hollows between these downs are lands of a richer quality, and with a plentiful water-supply. Near Bijapur itself the surrounding plain, which is the actual watershed of the general Dekhan plateau, is probably not less than 2,000 feet above the sea. The ground is arid and stony, and there is nothing to meet the eye except occasional clumps of trees about the villages. Although the immediate vicinity is not well cultivated or productive, the rivers

Bhima and Krishna enrich the land on their banks, and produce long tracts which in former days filled the granaries of Bijapur.

Publications about Bijapur.

3. The buildings at Bijapur form the subject of a large volume published by John Murray in 1866, under the editorship of Mr. T. C. Hope, C.S.;* and this, together with what Mr. James Fergusson has since written on the subject in his *History of Indian and Eastern Architecture*, make this famous capital unusually fortunate in the mode and extent in which it has been illustrated and described. The photographs and photographed drawings in the former volume are, however, not all that can be desired. The photographs are not printed by any permanent process, and have faded: the same may be said of the photographed drawings; but, in addition to this, the drawings do not come out well. They are so much reduced as in many cases to be too indistinct in detail, and the absence of all colouring robs many of the illustrations of painted decoration of more than half their value. If these drawings by Captain Hart and Mr Cumming are available, they should be reproduced in the best possible manner for publication in single plates, and moderately priced, and would then be of great value from an architectural and artistic point of view.

Bijapur architecture.

4. Yusuf Khan, to whom the dynasty of the Adil Shahis owes its foundation, was of Turkish descent, being a younger son of Amurath, Sultan of Constantinople, who died in A.D. 1451.

Forced to escape from his home at his father's death, he eventually found himself in India; was purchased for the body-guard at Beder; and subsequently raised himself to independence at Bijapur.

Besides the erection of the citadel and surrounding city walls, the Adil Shahis began their architectural career by utilising the Hindu remains of a temple for the construction of a mosque.

This system was, however, abandoned, and Ali Adil Shah in A.D. 1557 established a new building epoch.

Imbued, probably, with a taste for the Byzantine architecture of Constantinople, he avoided the use of Hindu forms or Hindu details, and developed a style peculiarly local. Unlike the Indian Saracenic architecture of Jaunpur and Ahmedabad, which was adapted and borrowed from the styles of the Hindus, the Bijapur architects introduced a domical style of great grandeur and boldness, more in resemblance to the Pathan architecture which developed in Northern India. The grandeur of effect which the larger Bijapur buildings possess is not easily realised, except on the spot. Photographs and drawings explain the construction and form of the great dome which covers the tomb of Muhammad; but it is in its presence alone that one becomes sensible of the simple grandeur of that wonderful pile. Major Mant, R.E., has left on record his impression that the building is of no architectural interest; but I feel convinced that when he goes to Bijapur and stands before it, he will reverse his opinion.

A complete chapter in the history of Eastern art may be read inside the gigantic walls of the city, and a work of great national importance and of lasting credit to

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* Architecture at Bijapur, an ancient Muhammadan capital in the Bombay Presidency, photographed from drawings by Captain P. D. Hart, R.E., A. Cumming, C.E., and Native draftsmen, and on the spot by Colonel Biggs, late of the Royal Artillery, and the late Major Loch, Bombay Army.

the British Government will be accomplished as soon as the buildings are systematically cared for and kept from falling into ruin and oblivion.

5. *Tomb of Sultan Mahmud Adil Shah, otherwise called the Gol Gumbaz* (marked W on the plan).—The mausoleum of Mahmud Adil Shah is one of the most remarkable tombs in India, and its dome is one of the largest masonry structures in the world (see sketch). The building was erected by Mahmud (A.D. 1626 to 1660), but was never quite completed. Besides its remarkable size, its method of construction claims the study and attention of both engineers and architects. The thrust of the enormous domical mass is counteracted by the compression given to the ring of the masonry from which the arching starts. This compression is produced by the weight of an enormous cornice formed out of pendentives acting inwards. On the platform of these pendentives the dome commences with a diameter of 123 feet, thus leaving a space of 13 feet width all round the interior, which forms a very perfect whispering gallery.

The exterior diameter of the dome is 142 feet 8 inches, and the exterior height from ground 198 feet.

The illustrations in Taylor and Fergusson's Bijapur are three wood-cuts of plans one photographic view, and seven photographic plates of drawings.

Repairs to this tomb were executed when Sir Bartle Frere was Resident at Sattara, and have been lately carried on afresh by Messrs. R. B. Joyner and C. Reinhold, Executive Engineers, successively in charge of the Kaladgi Division.

Repairs which were urgently needed to the dome some short time ago have, through the energy particularly of Mr. Joyner, placed the building in security.

Much more remains to complete what has been begun. The rows of large brackets which form the noble cornice over 80 feet high on each of the four exterior sides of the building are much mutilated and fallen, and no amount of money expended on this grand building will be of any availing credit to the British Government until the fallen brackets are replaced. The replacing them at the height of 80 feet is an arduous, but not insuperable, task. I would recommend that a thoroughly strong and secure scaffold be constructed for one of the four sides of the building, and so made as to be available for the other three sides.

Instead of strengthening the corbels, as proposed by Mr. Joyner in his Estimate No. 4 of 1880, with unsightly iron struts and bolts, the whole masonry should be *rebuilt*. This will naturally entail additional cost; but I most strongly recommend this course as being the only satisfactory one.

Inside the tomb and to the north is an unfinished opse-like addition intended as a resting-place for Mahmud's mother. Its roofless state is a source of damage in the rains, and *temporary covering would be of great advantage until more permanent measures can be afforded or matured.*

Within the enclosures of Mahmud's tomb a number of natives have erected unsightly dwellings. *These should be removed, and the whole area cleared up.*

The adjoining mosque to the west is a building of interest which should be preserved. During the famine of 1876-77 part of the interior was enclosed for an irrigation office, and I learned, during my visit in March 1881, that it is proposed to convert it into a traveller's bungalow—*a proceeding which I consider vandalistic and disfiguring, and which I strongly advise may be counterordered. The mosque should be cleared of all the enclosing walls and left as originally built and designed.*

The tomb and mosque and nakar-khana should, when the repairs are finished, be handed over to the charge of the district officials, and proper and responsible native

custodians placed in charge to keep the buildings in order. The walling round these buildings ought to be completed.

6. *The Jama Masjid* (marked V on the plan).—This fine mosque was built by Ali Adil Shah between A.D. 1557 and 1580 (see sketch).

The illustrations in Taylor and Fergusson's Bijapur are ground plan (woodcut), two photographic views, and eleven photographs of drawings. The building was put in repair when the British annexed Sattara. Other repairs latterly found necessary have been carried out, *but the structure wants careful watching to prevent damage by vegetation, or by rain leaking through the domes and roofs.*

The interior is decorated with bands of beautiful tile-work round the arches of the domes, and has a noble "mehrab," which was decorated in coloured and gilt frescoe arabesque of the most gorgeous character by Mahmud Adil Shah. *Every means should be taken to preserve this splendid decoration by careful cleaning away dirt and dust and by varnishing. There are some good antique prayer carpets (durris) left in the mosque, which should be carefully kept and the patterns copied for use.*

7. *Mihturi Mahal* (marked R on the plan).—The legend ascribing the building of this gateway and mosque to a "sweeper" or "mihtur" of Ibrahim Adil Shah I's reign is not confirmed by local tradition. I was told by a native, whose family has been long located at Bijapur, that the term "mihtur," as applied to the building, signifies "prince"—not "sweeper." The Chiefs of Chitral are still entitled "mihtur"; and it seems much more probable that this beautiful building, a place of Muhammadan worship, was dedicated to a prince rather than to a man of low caste.

The illustrations in Taylor and Fergusson's Bijapur consist of a plan (woodcut) of the gateway, a photograph showing the gateway and mosque, and ten photographs of drawings and details of the gateway by Captain Hart, Mr. Cumming, and the two native assistants. The masonry of both mosque and gateway is exceedingly well executed, and the skilful use of concrete blocks in the construction of floors is an admirable example of how that material is capable of being employed.

The ornamental details of the gateway are exquisitely wrought in stone, and afford the most perfect examples of the stone-cutter's art, whilst the wooden doorways are finely carved in bold design.

The building, in all respects a little gem, is under 30 feet square in plan, has three storeys, and the flanking minarets are little over 65 feet in height (see sketch).

The perforated stone railing or balustrade round the top of the gateway is much damaged, and should be renewed. The brackets and chujjas of the projecting windows are broken, and require restoration. The repair and preservation of both mosque and gateway should be skilfully and thoroughly carried out, and the two buildings given over to be jealously guarded and cared for by responsible custodians.

8. *The Citadel or Arkilla.*—Close to the entrance to the citadel or "arkilla" there are a quantity of Hindu columns which belonged to a temple, and have been recently unearthed. Near these is a mosque converted out of Hindu pillars and other materials of a Hindu temple, and in the enclosure of the mosque is a rude mound, beneath which are the bodies of the Muhammadans who were killed in capturing Bijapur under Mallick Karim-ud-din, A.D. 1312. Some of the columns in the colonnade of the mosque are of a black stone, and remarkable for their singular design and elaborate sculpture. *These Hindu remains should be preserved and not utilised.* Proceeding

further into the citadel the Mecca Masjid is reached—built in Yusuf Ali Shah's time,—a small square building surrounded by a colonnade. The masonry work of the central building is beautifully cut and laid, and the "mehrab" of the mosque very handsomely carved in stone. *This building should be kept in repair.*

The other buildings in the citadel are mostly in a ruinous condition. They were largely constructed of wood, the removal of which by the Mahrattas caused the collapse of so many walls and floors. An exception to these is—

The Ashar Mahal (No. 12 in plan).—This is a very singular building, with large wooden columns supporting the front verandah.

In Taylor and Fergusson's Bijapur it is illustrated by a ground plan (woodcut), one photographic view, and six photographed plates of drawings, sections details, &c.

Owing to its use as a sacred edifice for relics of the Prophet Muhammad,* it escaped destruction by the Mahrattas, and gives a good idea of the character of the palaces that were ruined elsewhere in the citadel and robbed of all their wood-work. The palace measures in plan 135 feet by 100 feet, and has two storeys, in front of which is the verandah with huge columns of wood over 33 feet high. The principal apartments are in the upper storey: they are decorated with coloured frescoes on the walls, with beautifully pierced wooden screens fittedto windows, and with doorways inlaid with ivory. *All of these are much neglected, and deserve a better fate. The frescoes could be cleaned and protected by a hard varnish, and the ornamental wood-work of pierced and inlaid work should be skillfully repaired and carefully oiled.* In one apartment are kept some carpets and hangings of State purposes. The workmanship, colouring, and pattern of some of these are first rate and in true oriental style, but they are badly cared for and full of dust. If they are to be preserved, *it is absolutely necessary that they be repaired and backed with strong cloth or canvas to prevent them falling to pieces, and hung against walls where they can be seen. The patterns of these carpets should be copied for the use of carpet-weavers in India.*

The remnants of the Adil Shahi library were preserved in the Ashar Mahal, but some years ago were removed by Sir Bartle Frere.

Considerable repairs are required to this building, which now has a desolate and neglected appearance. Some masonry arches were built up by Captain Hart to support and strengthen the roof of the verandah, but these are very unsightly, and a more skilful means of repairing the weakened roof could be employed by renewing timber beams.

The Anand Mahal, Palace of Delight, has some fine concrete floors, and was originally decorated with handsome coloured tile-work. It is proposed to convert this building into the Executive Engineer's residence. The *gateway* leading to the *Anand Mahal* has some splendid interior plaster-work *worthy of preservation* and illustration, and should *not be occupied.*

The *Tomb of Yusuf Turk* built by Ishmail Adil Shah (see the sketch) *should also be preserved and not occupied.*

Gagan Mahal. Arash Mahal. Adalat-ka-Mahal. Chinch Mahal.—The Gagan Mahal is very ruined, but has a grand archway. *Further ruin should be stayed, and the place cleared of débris.* The Arash Mahal is intended for the residence of the Civil Surgeon; the Adalat-ka-Mahal as the residence of the Collector and

Magistrate; and the so-called Chini Mahal or Granary as the offices for the district.

Alamgir Padshah's Mosque. Pani Mahal. Soneri Mahal. Sath Khundi Mahal Manzali. Chinch Didi Masjid.—Besides these are the Alamgir Padsha's Mosque, the Pani Mahal, the Soneri Mahal, the conspicuous Sath Khundi Mahal, built by Mahmud Adil Shah, and the Chinch Didi Masjid,—*all of which should be cleared of debris and decay arrested, as far as possible, by the extraction of roots and creepers, and by filling in cracks in masonry with cement, so as to mitigate the damage which heavy rain is liable to cause. Debris should be collected in convenient heaps and creepers planted so as to trail over them.*

9. *The Great Gun Malik-i-Maidan* (*A.D.* 1548).—This highly finished gigantic howitzer is of mixed metal ($\frac{4}{5}$ copper, $\frac{1}{5}$ tin), and lies on the outer walls of the city. Its extreme length is 14′ 3″, and its greatest diameter at the muzzle 5′ 2″ (see sketch).

It was at one time proposed to remove this fine specimen of ancient casting to England, but fortunately the bad roads put a stop to any such measure. *I recommend that the gun be properly mounted on the bastion where it now rests.*

10. *The Taj Baori* (*A.D.* 1626—1660).—This is a fine tank of water, measuring 223 feet by 219 feet, marked J on the plan, and has a façade facing the street, with an archway of 35 feet span flanked by minarets over 60 feet high. Two wood-cuts—elevation and plan, together with one photographic view, and two photographs of drawings—are in Taylor and Fergusson's book on Bijapur.

The façade of the building was never completed, and *it will much improve the general appearance to finish it.*

11. *The Ibrahim Roza* (*A.D.* 1626—1579).—This is about half a mile from the walls of Bijapur and to the south-east. The Roza or garden is an enclosure, in which are the tomb of Ibrahim Adil Shah II and his family, and the adjacent mosque. An inscription records that the buildings took over 36 years to complete; that 6,533 workmen were employed on them · and that the cost amounted to a sum equivalent to more than half a million pounds sterling.

Both the tomb and mosque are very perfectly executed and finished, and the best preserved of all the Bijapur monuments. They are illustrated in Taylor and Fergusson's volume by a ground plan (wood-cut), by two photographs, and by ten photographs from drawings made by Captain Hart, Mr. A. Cumming, and two native draftsmen. The photographs are, however, much faded, and the drawings do not appear either distinctly or to advantage.

The tomb of Ibrahim is remarkable for the manner in which the interior, 40 feet square, is flat-roofed in concrete faced with stone; also for the very rich ornament which has been lavished on various parts of the edifice.

There are six tombs in the interior, which is a perfectly plain apartment with no ornament save what appears in the elaborate stone trellis-work and tracery of the windows. The geometric devices interwoven with Arabic inscriptions produce a very remarkably rich lattice; but it is in parts much broken, *and should, if possible, be renewed.*

The outer walls of the four entrances are richly ornamented, and the wooden doors with carvings and gilt metal knobs present a bold and handsome appearance.

The central apartment is surrounded with a double verandah; the inner verandah has most rich and minute carvings on its columns and ceilings. The

exterior surfaces of the main walls were once covered with elaborately painted and gilt arabesques now much faded.

A skilful renewal of this surface decoration would greatly enhance the beauty of the tomb; but it must be done by an expert.

The ceilings of the verandahs want making secure, and one of the arches of the outer row of columns is cracked, and should be strengthened. Whitewash on pillars should be removed by application of strong soda and water and scrubbing off with hard bamboo brushes and palette knives. *All carved wood-work in doors and windows requires preserving by cleaning and oiling. The outside chujjas and brackets want renewal and repair.*

The mosque has a fine colonnade, arched and domed over with great skill and tasteful ingenuity. The whole of the interior and much of the exterior has been whitewashed. The interior walls and arches have been lined and picked out with grey! whilst underneath lies a profusion of coloured decorations. *The building is in need of some exterior repair to chujjas, brackets, roof, cornices, &c.*

The garden requires putting in order, and the vaulted chambers of the four walls which enclose it, and those in the lower part of the terrace which support the mosque and tomb, should be cleaned out. The whole place must be in proper custody to prevent damage and pollution (see sketch).

12. *Project for converting Bijapur into the Head Quarters Station of the Kaladgi District.*—During my visit in March last, I had the advantage of meeting Mr. Reinhold, Executive Engineer of Kaladgi, who lives at Bijapur, and he accompanied me over the several buildings in the citadel which it is proposed to convert into offices and residences for the district officials.

The question of making Bijapur the head-quarters of the district was raised in 1875 by Colonel (now Lieutenant-General) H. St. Clair Wilkins, R.E., then Superintending Engineer. Writing to the Bombay Government on the 31st December 1875 from Bijapur, he calls attention to the approaching visit of the Governor, and requests that his letter may be laid before him; points out that Bijapur is centrally situated in the Kaladgi District; has many advantages over the station of Kaladgi, which he describes as an obscure village. Kaladgi in former days a station of that southern portion of the district which belonged to the Madras Presidency, and when Bijapur pertained to the independent State of Sattara. Kaladgi described as miserably provided with public and private buildings;—as being very inaccessible; of no political importance; climate very hot; visited every few years by cholera; has no cold season; as being depressing to Europeans, with a bad water-supply.

On the other hand, he describes Bijapur as admirably adapted for a head-quarters station; points out that by its adoption money might be saved, since the expenditure necessary at Kaladgi would produce larger results at Bijapur. Bijapur once inhabited by a million people. The fort, over six miles in circumference, is filled with buildings of all kinds which are convertible. The climate of Bijapur is salubrious; it enjoys westerly sea breezes in the hot weather; is not subject to cholera. Its inhabitants speak well of the climate. The water-supply good. He also points out that the resuscitation of Bijapur as capital of the district would be an act of political wisdom; that ample accommodation exists for police and troops; that if Bijapur is made the capital, the most valuable of the public buildings and monuments would have a chance of permanent preservation.

Colonel St. Clair Wilkins, again addressing the Bombay Government on 23rd February 1876, enters into the details of the scheme, and points out that the civil officers of the district hold it to be for the public benefit. Bijapur free from cholera since 1872; is situated on the elevated watershed between the Bhima and Krishna rivers. Kaladgi in a depressed basin. Population of Kaladgi 6,591. Population of Bijapur 12,935. Estimated cost of completing buildings necessary to Kaladgi, Rs. 1,04,000. Estimated cost to convert buildings at Bijapur, Rs. 97,000. Suggests that Mr. Molecy, C.E., take up his head-quarters at Bijapur and carry out the alterations.

13. Mr. G. T. Molecy, F.R.I.B.A., C.E., was accordingly appointed Executive Engineer of the Kaladgi district, and submitted a series of estimates and plans for converting the following buildings at Bijapur :—

(1) Granary of Chini Mahal into offices for the Collector and Judge.

(2) The Serai into jail.

(3) The Idgah into Police lines.

(4) Yusuf Adil Shah's Masjid, &c., into Executive Engineer's office.

(5) The Adalat Mahal into a residence for the Collector.

(6) The Dowlia Ykut Mahal into a residence for the 1st Assistant Collector.

(7) The so-called Chini Mahal into a residence for the Superintendent of Police.

(8) The Anand Mahal into a residence for the Executive Engineer.

(9) The Arash Mahal into a residence for the Civil Surgeon.

The last of these estimates is dated 13th September 1876.

Orders by the Bombay Government.

14. The Bombay Government issued an order, No. 1862 of 1876, on the 4th November 1876, sanctioning the Bijapur project, but want of funds prevented any allotment being made. The matter was, however, ordered not to be lost sight of.

15. Mr. Molecy's plans and estimates were forwarded to me by the Secretary to Government, Public Works Department, Bombay, on the 7th April 1881, for my opinion and report on the proposed modification of the several buildings at Bijapur.

I have gone carefully over these plans and estimates, and now beg to submit my views.

Conversion of the Granary into offices.

16. Mr. Molecy's estimate, No. 8 of 1876-77, for the conversion of the *Granary* into district offices, Rs. 20,000.

There is, I think, no objection. This building known as the *Granary* or *Chini Mahal* was erected by Ibraham, grandson of Yusuf, founder of the Adil Shahi Dynasty, A.D. 1524—48. It is in the citadel or arkilla (No. 7 on the plan), and has a ground and upper floor, and measures 278 feet in length, and forms one end of a quadrangle 365 feet × 216 feet.

Arcaded recesses extend all round the quadrangle.

The greater part of the building is taken up by a large domed hall 128 × 29 feet 10 inches, and rises to the full height of the building. The wings project on

either flank, and were connected by a huge verandah, supported at one time by two wooden columns. Only the masonry bases of these now remain, and all the wood-work have been removed by the Mahrattas.

Some grain, pieces of sulphur, broken glass, and China porcelain were found in the *débris* and in the staircases, which were bricked up in the thickness of the massive walls. These and other discoveries, such as the gun found by Mr. Joyner, should be carefully preserved.

Coloured tiles were formerly used to decorate parts of the building. The west wing is assigned to the judicial branch, and the east wing to the revenue branch.

The body of the building is given over to various offices and to an entrance; record-rooms, cells, &c., are placed in the quadrangle.

Part of the Granary appears in photograph III, Taylor and Fergusson's book.

The great hall should not be disfigured by high partitions, and should be kept free from end to end. Screens would sufficiently divide up the space for offices. The great verandah should be rebuilt.

There is nothing to show in the plans what the new portions will be like in elevation, or what description of doors and windows will be provided. The style of Bijapur architecture should be adhered to throughout, and this may be done even in the most simple way.

The verandah in front of the cells and Judge's room is not in keeping: the arcading of the original building should be repeated.

17. Mr. Molecy's estimate, No. 85 of 1876-77, for converting the Serai into a jail, Rs. 20,000.

Conversion of the Serai into a jail

There is, I think, no objection to this, but there are only general ground plans with the estimate, and, excepting some elevations of a new workshed and warder's quarters, there is nothing to show what the buildings will be like.

The serai is 11 miles north-west of Bijapur, and is not illustrated in Taylor and Fergusson's book.

It would be in better keeping, and probably economical, to use nothing but mason arching instead of timber and tiled roofs.

18. Mr. Molecy's estimate, No. 94 of 1876-77, for converting the Idgah into Police lines, Rs. 24,040.

Conversion of the Idgah into Police lines.

The Idgah is shown on the plan. It was erected by Aurangzib in A.D. 1690. Almost the whole of the buildings proposed are new, and only the enclosing wall is to be utilised in the erection of the men's quarters. It would seem, therefore, better to leave the Idgah for the use of Muhammadans, and *build the lines on some unoccupied ground.*

19. Mr. Molecy's estimate, No. 75 of 1876-77, for converting the existing dilapidated buildings situated within 10 yards to the south of the Anand Mahal into Executive Engineer's Office, Rs. 3,000.

Conversion of the mosque of Adil Shah, &c., into the Executive Engineer's Office.

These buildings are described as the mosque of Yusuf Adil Shah, &c., but no plan accompanied the estimate, although one is referred to.

20. Mr. Molecy's plans for converting the Adalat Mahal into a residence for the Collector. Rough estimate, Rs. 15,000.

This building is of Ali Adil Shah II, and dates A.D. 1652. Its position is shown in the plan No. 4. All the wood-work has been removed.

There should be no pitched tiled roofing, but terrace roofing throughout. There is nothing in the design to show the character of the door and window openings.

21. Mr. Molecy's plans for converting the Dowlia Ykut Mahal into a residence for the 1st Assistant Collector. Rough estimate, Rs. 8,500.

Conversion of the Dowlia Ykut Mahal into the Assistant Collector's residence.

I think there is no objection to this; the building is not shown on the plan in Taylor and Fergusson's book.

The Dowlia Ykut *mosque* and *gateway* are shown at T on the plan and in photographs XLV and XLVI in Taylor and Fergusson's book. I presume it is not intended to touch these in any way.

The plan for converting the Dowlia Ykut Mahal seems to me suitable.

22. Mr. Molecy's estimate, No. 84 of 1876-77, for converting the Chini Mahal outside and to the south of the arkilla as a residence for the Superintendent of Police, Rs. 8,599.

Conversion of the Chini Mahal into a Police Superintendent's residence.

This building is not shown on the plan in Taylor and Fergusson's book. I think there is no objection to its use.

There are no elevations of the house with the estimate to judge from.

23. Mr. Molecy's estimate, No. 74 of 1876-77, for converting the Anand Mahal into a residence for the Executive Engineer, Rs. 4,000.

Conversion of the Anand Mahal into a residence for the Executive Engineer.

I think there is no objection to this building being used. The Anand Mahal was built in A.D. 1581 in the citadel (see No. 3 on the plan).

The plans do not show what the proposed alterations will be in appearance.

24. Mr. Molecy's plan for adapting the Arash Mahal as a residence for the Civil Surgeon. Rough estimate, Rs. 10,000.

Conversion of the Arash Mahal into a residence for the Surgeon.

I think there is no objection to this. The building is 50 yards to the east of the Adalat Mahal (No. 4) in the citadel.

The plans do not indicate what appearance the building will have when altered.

25. *I venture to suggest that the preliminary work for converting the various buildings mentioned be commenced without delay.* If the plans before me had been of sufficient detail, I would have made a design of how I think any one of the buildings should be treated; but if the Executive Engineer, Bijapur, will send me elevations and details of how the buildings would look after the alterations as proposed are carried out, I will, if necessary, make any suggestions for keeping the architecture in harmony with that of Bijapur, and furnish drawings for the purpose. This report is preliminary only, as more buildings than those mentioned remain to be inspected and reported on. For this purpose, and to obtain further illustrations of Bijapur architecture and art, I hope before long to repeat my visit.

Report on Ahmedabad, Poona, Karli, Ambernath, and Elephanta, dated 26th October 1881.

My visit to Ahmedabad, 18th to 21st March last, enabled me to see many of the architectural remains of that very interesting and wonderful city. The opening of the Rajputana State Railway makes the place as easily accessible from the north as it is from the south; and the immediate and first tendency of the improved communication is to damage and misappropriate the picturesque and beautiful buildings of the city. Already one mosque (Mia Khan Chisti's, built A. D. 1465) is used as a residence; and signs are not wanting elsewhere of the readiness, on the part of both Natives and Europeans, to utilise ancient architectural memorials for domestic purposes (see sketch No. 1).

Accessibility of Ahmedabad.

2. I submit that the most complete and proper care should be taken of the Ahmedabad monuments. The city is distinctly one of the most picturesque and artistic in the whole of the Bombay Presidency, and the number of visitors is now greatly increased. Some of the old tombs and mosques have received repairs and attention, but the number of those that are maltreated is a deplorable condition urgently calling for systematic remedies.

Necessity for conservation.

3. The Saracenic architecture of Ahmedabad was inaugurated by Ahmed Shah in A.D. 1411, and, as elsewhere throughout India, the Muhammadans began by building out of materials taken from Hindu temples. The peculiarity of Ahmedabad architecture is, however, that the Hindu masons who built the later mosques and tombs adhered closely to indigenous forms instead of to those characteristic of the moslems, producing buildings with a larger admixture of Hindu or Jaina detail than is seen in other capitals founded by the followers of the Prophet. Added to this, the plans prescribed by the Muhammadans for their buildings imparted to the style a breadth of conception not generally displayed in Hindu architecture, and a singular elegance and character thus appeared in the structures the remains of which lie scattered in the city and the neighbourhood.

Ahmedabad architecture.

4. Mr. James Fergusson, in his History of Indian and Eastern Architecture, has devoted a whole chapter to the architecture of Guzerat, of which Ahmedabad, for the last 450 years, has been the capital; and a volume, profusely illustrated by photographs by Colonel Biggs, R.A., and with historical and descriptive sketches by Mr. T. C. Hope, and architectural notes by Mr. Fergusson, was published in 1866. The plan of Ahmedabad and its environs is taken from the latter work.

Publications.

5. Mr. Burgess, Archæological Surveyor in Bombay, visited Ahmedabad in October 1874 and reported on, transcribed and translated some of the inscriptions on the buildings (see Archæological Survey of Western India—Kathiawad and Kachh, 1876).

Archæological Survey.

6. The city walls were built by Sultan Ahmed I in 1412, and were in 1486 so strengthened and repaired by Mahmud Begurra as to make Ahmedabad one of the best defended cities in India. In the seventeenth century the walls were noticed with wonder and praise by almost all European travellers. During the disorders of the early part of the eighteenth century they fell into considerable decay, and in 1755 the rains were so heavy that in several places great gaps were created. In the same year Momin Khan put them in repair. But later on, in 1780, they were, near the Khan Jahan Gate, breached by the British. After this gradually became

Ahmedabad walls.

so ruinous that carts and carriages could pass through, and the city was as unsafe as the suburbs, robberies and murders being common. In the early years of British management (1818-1825) complaints of the bad state of the walls were constant. In 1825 the Collector wrote:—"The city is on all sides open to thieves and robbers;" and in 1828 the circuit Judge drew attention to the state of the walls, urging that some of the city revenues should be set apart for their repair; but fearing that it was too late for any sufficient remedy. Shortly after this, chiefly by the exertions of Mr. H. Borradaile, the Collector, much public interest was taken in the restoration of the walls; a tax on clarified butter was levied, and in 1832, at a cost of £25,000, they were thoroughly repaired.* If Ahmedabad is as alive to its interests now as it was under the guidance of Mr. Borradaile, *the whole place would be placed in a complete state of preservation, and every architectural monument would have its responsible guardian.*

7. The following accounts of buildings and recommendations for remedial measures are in the order in which my visits were made:—

8. *Sidi Syad's Mosque in the "Bhaddar"* (marked No. 1 on plan).—This very beautiful building is at the north-east corner of the Bhaddar, and was built by Sidi Syad, a slave of Ahmed Shah (A.D. 1411). The Mahrattas desecrated it; and it is now used as a mamlatdar's kacheri, for which purpose the front openings have been bricked up, the inner columns whitewashed, and the beautiful marble windows of perforated tracery (see sketch No. 7) filled from inside with plaster. The roof consists of a series of small domes beautifully and fancifully corbelled.

9. *The clearing and cleaning of its disfigurements and impedimenta are urgent remedies which I strongly recommend to Government;* but, to place the building in a suitable condition, an office will have to be provided for the mamlatdar.

10. *Ahmed Shah's Mosque in the "Bhaddar"* [*A.D.* 1414] (marked No. 2 on the plan).—This is constructed out of Hindu columns put together with an irregularity similar to that observable at the Kutub Mosque near Delhi and at the mosques at Mandu in Malwa.

11. The interior is roofed in by a series of domes of the Jaina type, and on one side (to the right facing the west), enclosed by stone traceries, is a raised floor, evidently intended for the ladies of the palace. The *mehrab* in the centre of the west wall of the mosque has an inscription above it. On the right is a marble pulpit. The whole of the interior is very dirty. Some of the domes show signs of leakage; *to remedy this, they want repair outside, and vegetation should be removed.* In front of the building is a grave mound, where repose the bodies of those who were killed in the fight against the Hindus. The mosque is no *longer in use, and should at least be in custody and kept clean.*

12. *The Tin Darwaza* (marked No. 3 on plan).—This is a fine gateway in the city, and used to be an entrance to an enclosure in front of the Bhaddar Gate. In 1877 some repairs were executed, and a hideous roof removed from the upper terrace.

13. *The Jama Masjid* (marked No. 4 on plan).—This is an enclosure measuring about 400 feet by 250 feet, the mosque at the west end being about 200 feet by 90 feet. It is a handsome building (see sketch No. 2); but the minarets flanking the central arch were overturned by an earthquake in 1819.

* See Bombay Gazetteer of Ahmedabad, page 267.

The interior is particularly striking with its colonnade of fine pillars, zenana gallery with tracery, and numerous domes of the Jain type.

14. The *mehrab* is of marble, very effectively inlaid with stone, and has a marble inscription above it (dated 4th January 1424 A.D.). There is an upper gallery round the central portion of the mosque, which gives height and grandeur to that part of the building. Unfortunately all the stone columns and walls have been whitewashed. *The whitewash should be removed.* The tank in the centre of the courtyard of the mosque has been very unsuitably roofed over with corrugated iron.

15. *Ahmed Shah's Tomb* [*repaired A D. 1537—38*] (marked No. 5 on plan).—This building, to the east of the Jama Masjid, is a massive edifice with a dome, and has windows of tracery, the ornament of which is particularly effective and handsome. There are some good brass doors to the tomb entrances. *The whole place, which is extremely dirty, should be cleaned and placed in proper custody: vegetation requires removing from the roof; and the rear verandah, which has been ruthlessly bricked up for some wretched squatter, should be cleared.*

16. *Tomb of Ahmed Shah's Wives* (marked No. 6 on plan).—Near Ahmed Shah's tomb stands the enclosure which contains the graves and tombs of the Ranis. It consists of a basement raised some 9 or 10 feet above the ground, with a surrounding colonnade screened from the outside by stone tracery of great variety and elaboration. In the court, which is open to the sky, there are several tombs of marble, beautifully wrought in ornamental bands of sculpture; and the monument to Murkhi Bibi, a favourite wife, has an inlay of black marble and mother-of-pearl. *These are beautiful works of art, thoroughly appropriate to their object, and should be completely restored.*

17. A great deal of damage is done to the cloister, its marble terrace, and to the tombs, by trees and creepers; whilst slabs of marble have in many instances been utterly displaced. *The whole of the damaging vegetation should be outrooted.* The enclosure is surrounded by filthy native houses, and great squalor prevails, *the removal of which would do much good to this remarkable building. There should be a custodian here and the place kept clean.*

18. *Dustur Khan's Mosque* [*A. D. Circa,* 1486] (marked No. 7 on plan).—Mahmud Begurra's minister, Dustur Khan, built a remarkably elegant mosque in the southern quarter of the city, and surrounded it with a colonnade of pillars supporting small semi-circular domes, and enclosed by perforated stone tracery. The screen-work is very varied and bold in design; but unfortunately some one has thought proper to whitewash the building; *and until this is removed and the place cleaned up, its beauty is greatly obscured.* Beneath the courtyard is a subterranean reservoir 75 feet square, vaulted over with masonry. The building should be in custody.

19. *Rani Sipri's Mosque and Mausoleum* [*see sketch No.* 3] (marked No. 8 on plan).—The memorials of the wife of Ahmed Shah's son stand inside and near the Astodia gate of the city, and were built in A D. 1511—1526. Both buildings are of singular elegance, and delicately wrought with carvings and perforated screen-work. The mosque measures 55 feet by 20 feet, and has two flanking minarets, 50 feet high, gracefully tapered and enriched with architectural ornament. A pair of united bracket windows at the end facing the street gives a picturesque appearance to the exterior, and are as good examples of this class to be found anywhere in

India. The three *mehrabs* inside the building are of white marble, daintily carved, and are worthy of illustration in detail as fine specimens of this particular kind of mosque ornament. *The interior of the mosque is not as clean or properly taken care of as the building deserves.* The Rani's tomb is an elevated square building with a semi-circular dome, and surrounded by a low verandah with a splendidly incised plinth and enclosed with tracery. *Vegetation on the dome and roof should be removed, and the building put in repair and kept in proper custody.*

Illustrations wanted.

20. *Shah Alam* (marked No. 9 on plan).—The Pir Shah Alam, son of Kutb-ul-Alam, the saint of Bhutwa, was buried in A.D. 1175 in a handsome tomb 3 miles from Ahmedabad. After his interment the place acquired other edifices, and was enclosed by a high wall. The tomb is square in plan, surmounted by a dome, and enclosed by a verandah with beautiful stone trellis-work. The central apartment, in which rests the actual tomb, is surrounded by a second row of screens; and the tomb is covered by a wooden canopy exquisitely inlaid with mother-of-pearl. The interior of the dome is handsomely painted in fresco, and the floor is of marble. A marble fence or low screen encircles the canopy. The outer verandah has an entrance on each of its four sides, fitted with sliding doors of ornamentally-pierced brass plates. At one corner of the tomb are buried the children of Shah Alam. Great variety and fancy are displayed in the patterns of the stone and marble screen-work which encloses the outer verandah and the inner tomb. The building is now in fair order, considerable attention having been bestowed on it by Mr. Borradaile, C.S., late Collector of Ahmedabad.

21. *Mausoleum of Mai Alam at Shah Alam* (see No. 9 on plan).—This tomb is one of the buildings in the Shah Alam enclosure, but is plainer than that of the saint. *The surrounding courtyard requires weeding, and vegetation should be completely outrooted from the building as well as from the terrace.*

22. *Shah Alam Mosque* (see No. 9 on plan).—The mosque has two fine minarets at either extremity of the façade. The interior is a colonnade of three rows of six pillars roofed over with domes and covings. The masonry is unfortunately disfigured by a layer of whitewash, *which should be removed*, and the place is rendered still more unattractive by numerous swarms of bees in the domes.

23. *The Kankria Tank* (marked No. 10 on the plan).—About a mile from Ahmedabad to the south-east of the city is this fine reservoir, surrounded by masonry steps for a circumference of a mile, and with pavilions and a handsome supply sluice. In the centre is a small garden and baradari connected by a masonry causeway. *The place is well worth caring for and keeping in order.*

24. *Sidi Busir's Mosque and Tomb* (marked No. 11 on plan).—The ruined tomb and still more ruined mosque of Sidi Busir are buildings worthy of being preserved from further decay. The archway and minarets are all that remain erect of the mosque, and their handsome proportions and the variety in the stone ornaments render them valuable examples of the Ahmedabad style. The tomb is occupied by natives, and presents a disgraceful picture of dirt and neglect. *The place should be cleared and cleaned, and what remains of the buildings ought to be repaired.* The date of these edifices is not known for certain, but they belong probably to the reign of Mahmud Begurra.

25. *Haibut Khan's Mosque* (marked No. 12 on plan).—This is an instance of the way in which the materials of desecrated Hindu shrines were utilised

for the purposes of the Muhammadans. The interior colonnade has pillar shafts of varieties of Hindu ornament, raised one above the other to suit the plan on which the masjid was designed. Built at the time that Ahmedabad was first established, it is not only a monument of historic value, but shows how the local style developed itself architecturally.

26. *Azam Khan's Palace* (marked No. 13 on plan).—Azam Khan in A.D. 1636 caused this building to be erected; subsequently was used as a college; but in 1820 underwent conversion by our Government into a jail, and up to the present time carpets, durris, cloths and basket-work are manufactured by prisoners. The entrance gateway has a handsome dome with ingenious and effective cuspings. Below the dome is an underground chamber or taikhana approached by four staircases. This apartment served as a retreat during hot weather, and has in its centre a fountain, around which the inmates of the palace sat or slept in cool seclusion. The conversion of the palace buildings into a jail has destroyed their design and character; but the place is interesting, and its architectural appearance could be easily restored in drawings.

Drawings wanted.

27. *Sirkhej* (marked No. 14 on plan).—Across the Sabarmati river, and about 5 miles south-west of Ahmedabad, is the village of Sirkhej, to which the friend and counsellor of Ahmed Shah, Ganj Buksh, retired to, and died in A.D. 1445. A tomb and mosque were here erected by Kutub Shah in A.D. 1451, and Mahmud Begurra made the locality a resort, built the large tank and palace, and erected a mausoleum for himself and his queen Raj Bai.

28. *Tomb and Mosque of Ganj Buksh at Sirkhej* (see No. 14 on plan).—The tomb of the saint, said to be largest of its kind in Guzerat, is about 130 feet square in plan; the central apartment is surmounted by a flat dome, and the verandah covered with a series of smaller ones. Round the tomb itself is a screen of ornamentally-pierced brass, and the entrance is decorated with mosaics of coloured glass and mirror work ("shish"). The exterior of the verandah is entirely filled with windows of perforated stone, and the floor of the verandah is of marble slabs. The masonry of the whole of the building is literally smothered with whitewash, and *unless the removal of this barbarous disfigurement can be arranged for, the building will never be seen to advantage, or be worthily treated.* In front of the tomb is a handsome pavilion of lofty pillars surmounted by nine small semi-circular domes. The vandal who whitewashed Ganj Buksh's tomb gave this also a good coating, and *its removal should not be lost sight of* when merciful remedies are undertaken at Sirkhej. The mosque consists of a domed colonnade, measuring about 200 feet by 80 feet, with a courtyard surrounded by a verandah to the east, measuring about 200 feet square. The pillars in the mosque itself are lofty and handsome, and the whole effect of the building would be stately and pleasing if the inevitable whitewash had not been liberally applied. *It covers the columns of the verandah round the court and the columns of the building of the mosque itself, and should be taken off.* A handsome pulpit, the king's seat, and the marble mehrab adorn the interior; but the raised gallery for the ladies of the palace has been looted of its screen-work.

29. *Tomb of Mahmud Begurra and his Queen Raj Bai at Sirkhej* (see No. 14 on plan).—These buildings overlook the large tank at Sirkhej, and are divided by a porch which is now disfigured by whitewash and blue paint. The tomb of Mahmud Begurra is a domed building surrounded with windows of stone trellis-work. It contains his tombstone and those of his sons, all of which are very handsome and of white marble. The floor of the building is of black and white marble, *but no care is taken to keep the place clean, and the neglect and the whitewash which, as*

elsewhere, is omnipotent, render the place unattractive in spite of its good design and ornamental details.

30. *The Tomb of Bibi Raj Bai at Sirkhej* (see No. 14 on plan).—This contains three tombstones handsomely carved, but the building is neither so large nor so well decorated as that of Mahmud; and, as far as I could ascertain, the interior columns and screen-work are of plaster.

31. *The Sirkhej Tank* (No. 14 on plan).—The walls of the various buildings require careful examination, *and the numerous creepers and prolific vegetation which appear between the joints of the masonry should be utterly destroyed.* The porch in the southern colonnade of the mosque of Ganj Buksh is particularly threatened with destructive overgrowth, and its great beauty demands that so simple a matter as the cutting out of roots should be undertaken without delay The ruins of the palace, waste weir of the tank and supply sluice require periodical attention of the same kind; but there is a small mosque on the eastern side of the tank which is bricked up, neglected, and *should be cleaned out.*

32. *The Tomb of Azam Khan and Mozam Khan* (see No. 14*a* on plan).—This is a brick building on the road between Ahmedabad and Sirkhej, and is said to contain the remains of the two architects of Sirkhej. Its peculiarity lies in its great massiveness resembling the sloping bastioned architecture of Tugklugkabad near Delhi.

33. *Syud Usman's Tomb and Mosque* [*see sketch No. 4*] (see No. 15 on plan).—On the opposite bank of the river Sabarmati, and about a mile from Ahmedabad, are the mosque and tomb of Syud Usman, which Mahmud Begurra built in A D. 1460. The beautiful tomb building, although now so disgracefully neglected and maltreated, played a part when the subject of Indian architecture excited interest in Europe at the time of the Paris Exhibition of 1867; and the illustrations in Mr. Hope's Ahmedabad Book afforded to the British Commissioner suggestions for a building which had for exhibition purposes to be extremely open and airy.

34. It was mainly due to the attention given at this Exhibition by the Science and Art Department to the subjects of Indian architecture (by means of various illustrations and partly by photographs collected by Mr. Fergusson) that public interest awakened to the importance of collecting information on the subject. In fact, in 1868, at the instance of the Science and Art Department, a representation was made by the British Government to the Government of India to conserve and, record the most remarkable of the ancient monuments throughout the whole country. Later on sanction was obtained to survey parties for Bengal, Madras Bombay and the North-Western Provinces, which ultimately led to the appointment of Archæological Surveyors under the Government of India and under the Governments of Madras and Bombay.

35. The tomb is 80 feet square, and the mode by which the central dome is supported on columns gives a picturesque variety to the interior, and renders the design altogether the most successful of all those to be seen in Ahmedabad. The interiors of both the large central and four smaller domes over the sides of the building are beautifully ornamented after the Jaina style, and are well worthy of illustration by drawing or photography. The columns are of a simple Hindu pattern, and their number and peculiar arrangement would give the interior an effect of propriety and dignity if the building was treated with any respect.

Illustrations wanted.

36. The adjoining mosque is remarkable for its minarets which, although of more than ordinary simplicity for Ahmedabad, are graceful in outline and effectively ornamented. *Both mosque and tomb were during my late visit enclosed by a hedge*

of thorns, the interior space being used as a cattleyard by a native cultivator who lived in the tomb, and had enclosed a corner of the building with mud walls. Cows were at an opposite corner surrounded with dung, straw and dirt. Piles of fodder filled up the space over the tombs; vegetation was destroying the roofs of both mosque and tomb. The marble mehrab of the former as well as its marble floor had been removed bodily, and the whole place was a scene of greater desolation than I can describe. The obvious remedies are to clear the place of cultivator, cattle and jungle, and to put the two monuments in proper custody, and to repair the roofs which now leak violently. When this is done, the buildings should be fenced round with a simple iron railing to keep off cattle.

37. *Syud Alam's Mosque* (see No. 16 on plan).—In the north-west quarter of the city stands the mosque of Syud Alam. Built in Ahmed Shah's time, it is an early, although plain, example of how the style developed itself. Its plan and proportions are good, and all the columns and various parts of the structure were made expressly for it, and not taken out of a Hindu temple and adapted. The building was during my visit under repair by the Public Works Department.

38. *The Shakapur Mosque* (see No. 17 on plan).—This mosque is in the north of the city, and although small and unfinished, is one of the most ornate buildings in Ahmedabad. It was built in A.D. 1565, but the minarets were never completed. The tracery in their lower parts are most beautifully designed and executed. The frontage has a range of pointed arches, over which is an upper storey encircling the dome. *The interior is partly whitewashed, and the building is dirtily kept, whilst the roof is covered with vegetation. All this might with propriety be remedied.*

39. *The Achut Bibi Mosque* (see No. 18 on plan).—About a mile to the north of Ahmedabad is the tomb and enclosure of the wife of one of Ahmed Shah's Wazirs. The minarets which once adorned the entrances to the ground and the great archway of the mosque have been ruined, wholly in the first case, and partly in the second, by the earthquake of 1819.

The façade of the edifice is handsome, the carving of the lower parts of the minarets being most appropriately and elaborately ornamented. *To restore the buildings would entail great cost, but to clear them of dirt and débris, and to arrest further decay by the removal of vegetation, and by stopping cracks in the masonry with cement, is a work worthy of being sanctioned, and for which the necessary expense would not be excessive. The buildings should be in custody.*

40. *Darya Khan's Tomb* (see No. 19 on plan).—This simple and massively constructed building dates from A.D. 1453, and is near the Achut Bibi's mosque. Its dome is the largest in Guzerat, and entirely of brick. The walls and verandah are of the same material; but owing probably to the same earthquake that brought about the ruin of the Achut mosque, the verandah arches are badly cracked. The interior of the building is spacious and lofty, and a canopied tombstone occupies its centre. *The place, which is very dirty, requires cleaning, and should be in suitable custody.*

41. *Mia Khan Chisti's Mosque* (see No. 20 on plan).—This ornate building, erected in A.D. 1465, is near the Sabarmati river, north of the city. Like other buildings of its class at Ahmedabad, it has two handsome minarets flanking a central arch. The railway officials have converted it into a residence.

42. *The Shahi Bagh* (see No. 21 on plan).—About a mile and a quarter north of Ahmedabad, and on the banks of the river, is the Shahi Bagh, or Royal Garden, built in 1622 by Shah Jahan, then Viceroy of Ahmedabad,

in order to give work during a famine. Mandelslo describes the Shahi Bagh as being in 1638 very large, shut in by a great wall with ditches full of water, a beautiful house and very rich rooms.

In 1666 Thevenot found the king's garden full of trees and the resort of all the young people of the city. The palace building is now used as a residence by the Assistant Judge. The flood of 1875 destroyed the garden beds.

43. *The Queen's Mosque in Mirzapur* (see No. 22 on plan).—Near the travellers' bungalow on the road to the Delhi gate is the Queen's mosque, built probably A.D. 1430—1440. The building is 105 feet long, 46 feet broad, and 32 feet high. It takes its names from two ladies of Ahmed Shah's household whose tombs are close by. One, Rupavati, was by birth a Hindu. The minarets, although broken by the earthquake in 1819, are the chief beauty of the mosque. Their bases are exceedingly elaborate and full of the most graceful foliated ornament. Projecting bracketted windows are another handsome feature in the façade. The tomb is a good looking building, and has been repaired by the Public Works Department. The central and four flanking domes are supported on columns, the whole being open on all four sides. The insides of the domes are richly fretted. The mosque is still under repair; but the work is incomplete, and *the stone carvings would be much improved by cleaning.* The censer and chain is a conspicuous ornament, and appears in the mehrabs of the west wall of the interior as well as in the minarets. *When the repairs are complete, the two buildings should be in custody.*

44. *The Shah Khub-ki-Masjid.*—This is a small building in the city near the main street, and close to a highly carved and picturesque wooden pigeon cot (see sketch No. 6). There are four ranges of eight columns, the façade being flanked by two thin minarets. *The rain leaks badly in the roof; this requires remedy, and the place should be cared for.*

45. *Kutub Shah's Mosque.*—This building is in the city on the road to and near the Delhi gate. It nearly escaped mutilation, because the municipality wanted to straighten the road! It was built by Kutb-ud-din in A.D. 1446, and has a façade of 5 arches, the central flanked, as usual, by minarets which have been clumsily repaired. The mehrab inside is of white marble well sculptured, the top being inlaid with colored marble. *The mosque is used for storing bales of cotton, so is the tomb close by—a proceeding which ought to be stopped, and a proper custodian placed in charge.*

46. *Muhafiz Khan's Mosque* [*see sketch No. 5*] (marked No. 25 on plan).—Muhafiz Khan's mosque is in the north division of the city, and was built in 1465. It has three ranges of arches flanked by minarets of great beauty in design and sculpture. The arches are edged with carved work, and above each arch is a small bracket window. The interior pillars support two domes, which are highly enriched. There is a gallery above filled with elaborate tracing. The pulpit and five mehrabs are elaborately carved, and the whole building is second to none in beauty. Repairs are being executed by the Public Works Department, and when completed the building *should only be accessible through a proper and responsible custodian.*

47. *Dada Harir's Well* (marked No. 26 on plan).—About a mile north-east of Ahmedabad is Dada Harir's well, built in A.D. 1485 by a lady of the household of Mahmud Begurra. At the ground level it is 196 feet long and 40 wide. It is a singularly beautiful architectural work, and the second best of

its kind in Guzerat. The finest is at a place called Adalaj near Ahmedabad. The structure consists of flights of steps and galleries descending to the water. These are ornamented with columns and niches highly carved, and the effect of the vista from one end to the other of the Baori is most picturesque. *The place is now much neglected. The well itself wants cleaning as the water gets fouled, and vegetation should be removed from the masonry walls.*

48. *Minarets of a Mosque at the Railway Station* (marked No. 27 on plan).—These minarets are the tallest in Ahmedabad, but all traces of the mosque and of its history are for the time lost; the lower parts of the towers are damaged, and the repair of them by the railway authorities would be a graceful act.

49. I was unable to see the following buildings, but hope to visit Ahmedabad again in a short time:—

			No on the Plan
Malik Alam's Mosque	...		(28)
Butwa ...	...	.	(29)
Queen's Mosque in Sarangpur		..	(30)
Mosque of Muhammad Ghaus	. .	..	(31)
Mir Abu Turab's Tomb	..	..	(32)
Baba Lului's Mosque ...	.	...	(33)
Tombs of the Dutch	...	...	(34)
Shah Wajih-ud-din's Tomb	...	...	(35)
The Svami Narayan Temple	...	...	(36)
Hastings Temple	...	...	(37)

50. One of the best features of Ahmedabad is its domestic architecture. The town is full of highly carved wooden house fronts, small temples, pigeon houses and the like, which for variety and picturesque beauty cannot be surpassed by the best specimens of wooden architecture in Normandy and Cheshire (see sketch No. 6). *I venture to suggest that estimates for the various restorations and repairs here recommended be called for, and that a requisite number of custodians be appointed to take charge of the buildings specified.*

Domestic architecture.

51. *Rock-cut Temple near Ganesh Khind, Poona* (see diagram).—On the road to the Ganesh Khind and a little to the west is a curious temple to Shiva. Mr. Fergusson says of it:—

"One more illustration must conclude what we have at present to say of Hindu rock-cut temples. It is found near Poona and is very little known, though much more appropriate to cave architecture than most examples of its class. The temple itself is a pillared hall with apparently ten pillars in front, and probably had originally a structural Sikra built on the upper plateau to mark the position of the sanctuary. The most original part of it is the Nandi pavilion, which stands in the courtyard in front of the temple. It is circular in plan, and its roof, which is a great slab of rock, is supported by apparently sixteen square pillars of very simple form."—(See page 447 of *History of Indian and Eastern Architecture*)

The illustration in Fergusson's book gives an impression of much greater size than is actually the case, and being thus prepared, I at first found some difficulty in identifying the place.

The circular mandapam is of solid stone, but four columns have fallen. The resident Brahmins called the temples "Panch Panduaki Dewal." The fallen stonework could be reset at a moderate cost.

52. *Temple of Parvati, Poona.*—Picturesquely situated on a hill south of the city of Poona is the temple of Parvati, built by the Peshwa Balaji Baji Rao in A.D. 1749. As an example of architecture of this date the building is not without interest, and should ultimately find a place among illustrations of Indian architecture. It has an endowment of Rs. 1,500, and seems to be in fair order.

53. *Karli Caves* (see sketch).—Karli is a small railway station on the way from Poona to Khandala. The caves are on a hill about two miles north of the station. Full description is given in *Cave Temples of India* by Fergusson and Burgess. The ascent to the great cave is very steep, and rises 600 feet above the plain. At the foot of the hill is a small village called Vihergang—meaning probably the "village of the Viharas," and thus bearing collateral testimony to the Buddhist origin of the caves. It is generally agreed that the age of the Karli Cave is antecedent to the Christian era. It is the largest Chaitya cave in India, its interior dimensions being 124 feet 3 inches long by 45 feet 6 inches; the width of the centre aisle is 25 feet 7 inches (see diagram taken from Fergusson's *History of Indian and Eastern Architecture*). The wooden ribs of the roof remain entire, and the circular screen of wood filling up a portion of the great arch in front has been replaced (over A). The columns of the central aisle have elaborate capitals, and the walls of the vestibule at A D are decorated with bas-relief of figure subjects. The temple to the goddess Bhawani at the entrance (C) has a hideous roof of sheet-iron. The horse-shoe arch at A has been bricked up and fitted with an unsightly doorframe and door, whereas a simple iron bar gate would answer the purpose better and not interfere with appearances.

The Buddhist Dagoba inside the temple at B has been coloured by the Hindus, who worship it as a Lingam; but they have no business in the place, and ought to be prevented from using paint and whitewash on the walls and sculptures. The lighting of cooking fires in the cave should also be stopped. Whitewash and paint should be removed, and the temple delivered over to a custodian. The rock above the Bhawani temple at C is cracked, and the dangerous piece should be removed. A pipal tree, which has struck root at the same place, should also be eradicated. The caves of Bhaja and Bedsa are near Karli, the former 2 miles south of Karli, and the latter 5½ miles east of Bhaja.

54. *Ambarnath.*—Four and a half miles from Kalyan junction on the Great Indian Peninsula Railway is the temple of Ambarnath in a pretty valley on the edge of the river Wadhwan. The temple, Mr. Burgess says, dates from A.D. 1060, and is an interesting example of Hindu architecture. Although in a ruinous state, it is still of great beauty. Casts and drawings were made in 1868 by the Superintendent of the School of Art, Bombay; and as far as illustration is concerned, all that is necessary has been done, provided the illustrations are still available. The temple is dedicated to Shiva. and is wholly of stone; it measures 87½ feet from east to west and 68 feet from north to south. The sanctum is reached by steps, and the roof over it has fallen in. The body of the temple, *i.e.*, the adytum, is very fine; the columns are elaborately sculptured, and the construction of the roof is massive. The side aisles of the adytum are coved and the lintels between columns are in many places dangerously broken. There are porches on the north, south and west sides, all very elaborate in design and execution. The exterior of the temple is as rich in ornament as the interior. *The pipal trees in the roof should be outrooted.* An enclosing wall with cells formerly surrounded the building; now only part remains, and the enclosed space is

strewn with carved stone fragments. *These should be collected so as to be seen, and the whole area cleaned up. The interior of the temple should be made secure by strengthening the broken stone-work with iron cramps, and the roofs should be rendered impervious to rain by filling in the cracks with cement. The place should be in custody, and it would facilitate this if a rough stone wall could be built round the edifice to keep off intruders.*

55. *Caves of Elephanta.*—These caves are in the charge of Lieutenant W. W. Robinson, R.E., Executive Engineer of the Bombay Defences, who accompanied me to see them in March last. His predecessor, Captain Haydon, R.E., obtained the necessary sanction for a resident custodian, who keeps them clean and receives the fees paid by visitors. The place is consequently better cared for than any of its class in India. Mr. Burgess, Archæological Surveyor of Bombay, has published an account of the caves, which are therefore well known and frequently visited. The fees paid by visitors more than cover the expense of care and custody.

Note on Works undertaken in the Bombay Presidency, dated 14th September 1882.

1. I find from a Minute on the restoration of ancient buildings by Mr. J. Gibbs, dated Bombay, September 1878, that in 1856 Government, at the recommendation of Sir Bartle Frere, sanctioned a proposal of Mr. Gibbs, when Assistant Commissioner in Sind, for the repairs of the Jama Masjid at Tatta and tombs on the Makli hill, and contributed Rs. 5,000 towards the former, which was supplemented by the Syads who had charge of the mosque with a similar sum, and Rs. 2,500 towards the latter. In 1867 a sum of Rs. 5,300 for the Shah Alum Roza and Rs. 5,000 for the buildings at Sirkhej, Ahmedabad, were sanctioned. In 1869 and 1870 Rs. 3,000 were sanctioned towards the repairs of the palace, harem and tank at Sirkhej, and in 1871 and 1872 upwards of Rs. 2,000 were expended on the Roza of Rani Sipri on the Astoria road, Ahmedabad.

2. The late Major Mant, R.E., was appointed Conservator of the Archæological and Architectural Remains in the Bombay Presidency on the 7th September 1878, and in July 1879 inspected and reported on the buildings at Ahmedabad.

3. My reports on Bijapur, Ahmedabad, Karli, Ambernath, and Elephanta were submitted last year to the Bombay Government.

Bijapur.

The conversion of the Bijapur city into a head-quarter for the Kaladgi district promises to be one of the most important of measures in the scheme for preserving national monuments. The estimate for the whole project does not include special repairs to the architectural buildings, which I hope will be thoroughly carried out.

Elephanta.

4. The caves at Elephanta have been cleaned up under Captain Robinson, R.E.

Ambernath.

5. The fine, ruined and deserted temple at Ambernath is about to be attended to. Repairs based on the proposals of Mr. W. B. Mulock, Collector of Thana, amounting to Rs. 586, have been sanctioned, and an estimate is under preparation for the rebuilding of the upper portion of the walls of the sanctum and tower of the temple.

Mr. Mulock's suggestion.

6. Mr. Mulock has made some suggestions in respect of the (1) Bassein Fort and its large ruins; (2) the Kanheri caves in Salsette; (3) the Kondane caves below Rajmachi Fort in the Ghor Ghat ravine; and (4) an old temple to Mahadeo in the Inam village of Lonad.

He writes as follows to the Bombay Government:—

"Regarding the former (Bassein Fort) in 1860, Government granted a lease for 30 years to a Major Littlewood, which is now in the hands of his widow Mrs. Littlewood. The lease expires in 1890, and on its expiration, I am strongly of opinion it should not be renewed, as Mrs. Littlewood is constantly making claims to trees, &c., within the Fort; and while thus occupied by a lessee, it is impossible to effectively ensure the protection of the ruins.

Bassein.

"The Kanheri caves should have a custodian like the Elephanta caves, who would keep them clean and reside among them. A few years ago some visitors to the caves were horrified by finding a corpse hanging from a Daghoba in one of the principal caves. The deceased had, it seemed from police inquiries, committed suicide.

Kanheri.

"The Kondane caves were handed over to the Forest Department, but I don't believe a forest officer or sepoy has visited them since the issue of the Government Resolution No. 595, dated 22nd February 1877. The caves should be handed over to the patel of the village, who should be made responsible for its care. The Mahadeo temple at Lonad was reported on by Mr. Sinclair's Indian Antiquities, IV, 68. When I saw it a few days ago, a number of rice straw ricks were heaped up around it, which, if they caught fire, would have irretrievably destroyed these beautiful and valuable old remains. In my opinion a cactus hedge should be planted round this also, as I suggested for Ambernath, and the patel should be answerable that no further injury is done. The beautifully carved stones lying about should be collected, and placed within the enclosure also. Regarding all the above, I think the respective patels and talatis should make an annual report on the state of the ruins, and the mamlatdar or his first or district karkun should once a year visit each, and submit the patel's and talati's reports, with his own remarks thereon, to the Collector. The due supervision of these ruins would then be ensured."

Kondane.

Lonad.

I hope soon to visit the buildings.

7. With respect to the Karli caves, an estimate has been sanctioned for providing iron gates to the caves, and for removing old masonry from the archway. The question of cleaning up the old Buddhist carvings and the interior of the cave has been the subject of some correspondence, and the question is, as far as I am aware, unsettled at the present moment.

Karli.

Some repairs to the monuments and mosques at Ahmedabad are this year provided for, but I hope that the Bombay Government will cause the work to be thoroughly carried out. An Imperial grant-in-aid will be given.

Ahmedabad.

Mr. W. Woodward, Collector of the Panch Mahals, has invited my attention to the ancient buildings on the Pawagar hill, and I hope to visit the locality before long.

Pawagar.

Q

Note on Preservation of Monuments in Bengal, dated 17th September 1882.

Sir Ashley Eden in 1880 ordered the Great Temple at Buddha Gya to be repaired; this was before I was in a position to give any advice, but I visited the building in March last, and submitted the following observations to the Government of Bengal in a letter dated 23rd June 1882:—

"I have the honour to submit the following suggestions and remarks on the restoration works at Buddha Gya, visited by me on the 7th March last.

"2. These works were commenced before the establishment of my department, and not having seen the great temple previous to Mr. Beglar's operations, my knowledge of its former condition is confined to the descriptions and illustrations in Mr. Fergusson's History of India and Eastern Architecture, and in Rajendra Lall Mittra's volume on Buddha Gya. Looking, however, to the character of the masonry, which I examined in company with Mr. Beglar, and which is merely a case of mud and brick, and considering that the original surface protection was nothing but plaster, I do not see how the security of the building could have been provided for in any other way than that carried out under Mr. Beglar. The careful renewal of the exterior plaster envelope on the old architectural lines seems to be the only manner of successfully conserving such a building; and although the cost has been considerable, the great historical value of this relic of Buddhism, in my opinion, fully justifies a large outlay.

"3. If too much has been done anywhere, it is in the votive buildings which surround the temple; but I hesitate to criticise where my previous knowledge of the condition of these particular monuments is so meagre. There are, however, three important points to which I respectfully invite the attention of the Bengal Government:—

(i) The advisability of completing a series of photographic views of the buildings, showing all the various stages of disrepair, progress, and completion, accompanied by carefully measured plans.

(ii) Provision of permanent custody of the buildings, to prevent their being misappropriated by the natives.

(iii) The disposal of many hundred small stone fragments and votive offerings collected by Mr. Beglar.

"4. In reference to illustrations, Mr. Beglar's photographs already furnish much information; but I suggest that completion photographs be taken, and plans be made to show the former and present state of the monuments. These would, I submit, furnish an important memoir of Buddha Gya, and be worthy of publication.

"5. As regards custody, the large expenditure of money will be of little avail if the structures are left to the mercy of the natives. I would suggest walling in the site, to prevent trespass of cattle and idlers; and that a permanent and responsible custodian be appointed under the Magistrate of Gya, as soon as Mr. Beglar is ready to make over charge of the buildings.

"6. So many of the votive topes and stone fragments are mere duplicates that there could be no object in retaining them all on the spot. I would therefore

recommend the Bengal Government to authorise Mr. Beglar to select those which should be kept *in situ*, and to make up collections for presentation to the following institutions :—

The Imperial Museum, Calcutta.	The Museum at Bombay.
The Central Museum, Madras.	The Museum at Jaipur, Rajputana.
The Museum at Lahore.	The Phayre Museum, Rangoon."

2. Mr. Beglar informs me that he has drawn up a report and estimate on the preservation of Shir Shah's tomb at Sasseram, and that he has taken in hand the security of the roofs and domes of the building. I have not yet been able to visit Sasseram, but hope to do so shortly, and that provision for completing the repairs will be forthcoming.

3. Sir Ashley Eden invited my attention in February 1882 to the temples in Orissa. These and other buildings in Bengal will be reported on in due course.

B

Reports on Central India Monuments, together with a Note on Works undertaken.

Gwalior.

1st January 1881.

I visited Gwalior during November. Until quite recently, Gwalior has been an out-of-the-way city. The old mail road between Agra and Bombay passed at too great a distance from the fortress to make a visit convenient to travellers, and the place was rarely seen except by those whose duties located them at Morar, or by an occasional tourist. The railway now brings Gwalior within 7 hours of Agra, and on completion of the bridge over the Chumbul the journey will be reduced to 4 hours. Eventually the line of railway will run through to Hoshungabad and be the main artery across Central India. Gwalior will therefore soon have many more visitors than formerly was the case, and any steps taken by Government to preserve the fine monuments in and about the fortress will be highly appreciated. I regret to have to record that travellers often remove stone carvings, pieces of colored tile-work, or any fragmentary relic that they can carry off. Others, besides travellers, have been the cause of even greater vandalism. Whole columns were some years ago removed from the fortress to adorn gardens in Morar, and some stones found their way to greater distances beyond. This, however, is being rectified, as my letter to Colonel Osborne, the Political Agent at Gwalior, quoted below* will show. The present General Commanding at Morar, General Gordon, takes considerable interest in the fortress, and I have no doubt that he would find it possible to provide a custodian for the monuments in the fort, and that his example would be followed by his successors. Nothing should be damaged, nothing removed.

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* *Letter to Colonel Willoughby Osborne, dated Gwalior, 19th November 1880.*—"I have made an examination of the monuments and buildings of interest in the Gwalior Fort, and see how very large is the field for doing very creditable work towards preserving them.

With the advantage of Captain Keith's experience I have seen all that is of greatest interest, and have examined the two Sas Bahu temples, the Teli-ka-Mandir, the small Jain temple beyond, and the palaces known as the Shah Jahani, the Jahangiri, the Karan Mandir, the Vikramaditya, the Man Mandir, and the Gujari Mahal.

Besides these, there are scattered all over the fort many interesting carved fragments of buildings which are no longer standing. The debris composed of these form a thick covering from one end of the fort to the other, and I feel convinced that a large mass of matter interesting and valuable as artistic records of the past lie buried many feet under the ground. To undertake a systematic restoration or repair of the wonderful buildings in the fortress is out of the question on account of the great cost which would be involved, and also because in a great number of cases there is no evidence as to the plan and character of the buildings which formerly existed. A great deal may, however, be accomplished by carrying on what Captain Keith has already started. He has, with the aid, I understand, of a Committee composed of yourself, General Gordon, Major Crowdy, R.E., and the liberal grant of Rs. 1,000 from Cantonment Funds, been able to rescue the Teli-ka-Mandir from ill-treatment as a soldiers' coffee-shop, and the proposal of the Committee to convert this building into a kind of museum for carved fragments of stonework seems to me to be worthy of all encouragement and help. I venture to suggest to you that the Government of India should be asked by the Agent General for Central India to grant a sum of Rs. 5,000 for—

(1) the rescue of carved pillars and stone fragments from the debris which surrounds so many buildings in the fort;
(2) for the collection of these carved stones at the Teli-ka-Mandir;
(3) for cleaning the magnificent stone carvings of the temples called the—
Sas Bahu, | Teli-Ka-Mandir,
and for the removal from them of the plaster put on by the Muhammadans, and for the cutting away of destructive vegetation;
(4) for the removal of the coats of whitewash which now cover the carved trellis and carved work of the courts in the Mandir palace.

As regards the custody of the buildings outside the fortress, His Highness the Maharaja would doubtless carry out any recommendation made by the Political Agent at Gwalior for prevention of damage and for keeping them clean. The buildings, &c., of interest at Gwalior are—

FORTRESS.

Gates.

1. Alamgiri Gate.—1660 A.D.
2. Hindola Gate.—1479-1516 A.D.
3. Bhairon Gate.
4. Ganes Gate.—1421-1454 A.D.
5. Lakshman Gate.—970 A.D. (and rock-cut temple).
6. Hathiya Gate.—1486-1516 A.D.
7. Hawa Gate.

Palaces.

1. Shah Jahani.
2. Jahangiri.
3. Karan Mandir.—1454-1479 A.D.
4. Vikramaditya.—1516 A.D.
5. Man Mandir, Man Sing's Palace.—1486-1516 A.D.
6. Gujari Mahal.—1516 A.D.

Temples.

Teli Mandir.
Sas Bahu (two temples).
Jaina Temples.

On the sides of the Rock of Gwalior—inside and outside the Fort—rock sculptures of Jain figures.

OUTSIDE THE FORTRESS.

Tomb of Muhammad Ghaus, built in the early part of Akbar's reign.
Jama Masjid near the Alamgiri Gate.—1665 A.D.
Muhammadan tombs near the north end of the fort.

Plans of almost all these have been made by General Cunningham—see Vol. II of his Report, chapter XVI; but I propose to put in hand drawings showing in greater detail the beautiful ornamentation of the best parts of the palaces and of the temples.

If to this sum His Highness the Maharaja of Scindia would add something more, he would be aiding in a noble work and giving assistance to the preservation of works of high artistic interest in his own territories.

The Tomb of Muhammad Ghaus in the old city of Gwalior is sadly in need of cleansing and repair to the beautiful screen-work which renders that building so attractive and remarkable. This, however, is clearly a work which could only be done with the aid and practical assistance of His Highness the Maharaja. As Captain Keith takes so enthusiastic an interest in all that concerns Gwalior, and has already begun to collect stone carvings for the proposed museum at the Teli-ka-Mandir, I think that he is quite the most fit officer to be entrusted with the carrying out of the work. I understand that he is retiring from the Army; his services could therefore become available, and I would suggest, if the grant is sanctioned for the works specified, that he should be engaged to carry them out for a limited period of six months from the 1st January next at Rs. 250 per mensem, working in concert with the Committee already formed for the proposed museum and submitting his accounts to me. I too should always be ready to give him any advice and assistance either personally or with the draftsmen which with the consent of the Agent General and the General Commanding I propose shortly to depute to the Fort for the purpose of making drawings and illustrations of the best portions of the buildings."

His Highness the Maharaja of Scindia has within his territories many fine ruins of great artistic beauty, and isolated fragments of carvings (that could not be replaced in their buildings) might be collected and arranged in a museum at Gwalior, and form the nucleus for a school of Oriental art and architecture. An institution of the kind would enable the Maharaja to patronise good art.

He has already erected one huge palace of modern Italian architecture, and has nearly completed a second building which is in a very debased native style. During my recent visit to Gwalior I went over this new edifice. The best feature of the exterior is a colonnade, circular in plan, with some elaborate and well carved stone pillars and spandrils. These are being painted over in oil color a dark brown and picked out in bright reds and blues !

The interior reception and other rooms are being gaudily decorated in frescoe arabesques. The head painter, who hails from Nagpore, is very clever with his brush as far as ornamental drawing goes, but has little idea of harmonising and toning down his colors.

He took me with great pride into one of the rooms to see his *chef d'œuvre*—a decorated pilaster, the lower panel of which contains a copy of a coloured photograph of Lydia Thompson in satin tights !

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Agent to the Governor General, Central India, Indore, dated Simla, the 3rd August 1881.

I have the honour to inform you that I have recently visited Gwalior and have seen the work being carried on by Major Keith in the fortress. The cleaning of the sculptures in the fine temples, the Teli-ka-Mandir, and the two Sas Bahu is highly satisfactory, and Major Keith has by untiring supervision accomplished considerable and most creditable results at small cost. I have received a copy of his preliminary report, but I have suggested to Major Keith the propriety of drawing out a detailed report of the work that has been done and is in hand; also that he should compile a list of all buildings, caves, and sculptures worthy of being preserved, adding any observations of his own on the peculiarities of the varieties of art exemplified in the fortress. This report is being printed.

2. The work of clearing out the Man Mandir Palace has not yet been commenced, but I understand that the commissariat stores can be transferred to the old magazine or some other vacant building of no architectural importance; but I would suggest that an early application be made to the military authorities for the immediate handing over of the Man Mandir Palace to Major Keith, in order that the fine courts and apartments may be cleaned and the whitewash removed from the masonry walls, trellis work, and sculptured ornaments. Major Keith has a good deal more work to do in connection with the work specified in the enclosed report, for which Rs. 5,000 was sanctioned. * *

* * * * * * *

4. The fine old tomb of Muhammad Ghaus in the old city is much in need of repair and clearing out, and the chuttries of maharaja's ancestors in the new city,* although of considerable beauty, have been obscured by repeated coats of whitewash. Many of the picturesque balconies and windows of the city houses are spoilt by whitewash, the prohibition and removal of which from stone trellis work of any kind is very advisable.

* I. Daolut Ram, dating about 1811.
II. Jinguji Rao, dating about [illegible].
III. Patel Sahib, dating about [illegible].

5. On the south-east face of the fortress is a group of caves containing some very interesting Jaina statues and sculptures; some are closed in by huts occupied by natives and cattle. It would be of advantage to clear the place of all such dwellings. The Urwahi valley in the fort has a large number of similar Jaina caves and sculptures, and large masses of debris obscure their bases. * * *

Extract from a letter from CAPTAIN H H. COLE, R E, Curator of Ancient Monuments in India, to SIR LEPEL GRIFFIN, K C.S I, Agent to the Governor General for Central India, Indore, dated Simla, the 31st October 1881.

* * * * *

2. In regard to the further employment of Major Keith, I would suggest that an application be addressed to the Government of India for his services for one year from the 14th March next, in order that he may superintend the completion of the work to be done at Sanchi, as detailed in my report of the 10th January last, and in order that he may carry out the preservative measures at Mandu, recommended in my report of the 5th January.

Copy enclosed.

Copy enclosed.

3. If this can be arranged, it would, I suggest, be better for Major Keith to utilise the cooler seasons at Sanchi and Mandu, where he must be under canvas, and to return to his Gwalior work in the hot weather, when he cannot be in camp. It would, I submit, be a good plan to send a Public Works subordinate, who is a good draftsman, to work under Major Keith at Gwalior.

4. As regards Sanchi, I venture to repeat my suggestion that an Engineer be employed to rebuild the fallen gateways, working in communication with Major Keith, and that photographs be taken when the work is completed.

5. In reference to Mandu, the survey referred to in my report of the 5th January is complete; and a copy attached shows what jungle and vegetation should be cleared away.

6. If a further grant is required for the Sanchi work, I would suggest that application be at once made to the Government of India.

7. For Mandu, I would recommend an application for a grant of Rs. 2,000.

* * * * *

Sanchi Kanakhera in Bhopal.

10th January 1881.

I visited Sanchi on the 27th November 1880, and remained there some days in camp. A survey has been made of the hill on which the Buddhist topes and other monuments are; and this plan serves as a record of their present state, and shows what should be done in the way of clearing away overgrowth and trees.

I am indebted to Captain Bell, R.E., V.C., for the permission which was given to have the plan and key-drawings of the fallen gateways reproduced at the Intelligence Branch of the Quarter Master General's Office at Simla.

The jungle has increased very much since I was making casts in 1869, and great damage has been done by the spreading of roots and branches of trees to the railing round the great tope. The opening made in this tope in 1822 is now overgrown with creepers, and they are forcing out the masonry face work which covers the hemisphercial mound The railing on the south has completely fallen

and *natives have been recently mutilating the carvings on the eastern gateway. They have also cut up one of the pillars* (*at H*) (erected by Asoka over 2,000 years ago)—*for grindstones.*

As regards *custody*, it is absolutely necessary for a trustworthy watchman to be always on the spot in order to prevent such wilful damage. The remains at Sanchi are second to none for their importance as evidences of early Buddhist history, religion and art, and it is worth the wages of three or four native custodians to ensure that damage goes no further, more particularly as the Bhopal State Railway will pass near Sanchi on its way to Bhilsa and make the place much more accessible.

The plan of the hill shows the position of all the topes, buildings, gateways, &c., and of all the fallen masonry on which there are valuable inscriptions and carvings. As a temporary measure, I have had the important fallen stonework numbered and the small fragments have been collected near the northern gateway.

The first work is to thoroughly clear away and outroot the trees and overgrowth shown in the areas colored green on the plan. Great care must be taken to destroy the roots, particularly in the surface masonry of the Great Tope.

I think that the roots of the tree behind the northern gateway should be examined, and if they are doing or likely to do harm to either the tope, the gateway, or the railing, it should be carefully felled and the roots dug out. If not, it might remain, as it rather adds to than detracts from the picturesque appearance of the place.

In removing the jungle not more should be cut away than actually threatens damage to the masonry structures.

The breach in the tope at the south-west should be filled up and the facing stones relaid.

As regards the *restoration* of stones to their former positions, a great deal may be done to immense advantage. The railing which once surmounted the hemisphere of the tope has a few pieces on the tope, and many lie below between the tope and its surrounding railing. These should be first collected on the top and then, as far as possible, pieced together.

All the carved fragments behind the stone railing and the tope (excepting the figures of Buddha, which are still erect) should be removed to the open spot in front of the northern gate, where they can be well seen.

The *northern gate* is in fair condition. The capital of the Asoka pillar lying near it (105, 105a, 106) should be set up (at G) with the statue, the pieces of the broken pillar collected and examined for any inscription.

The *western gate* is much ruined. One column and dwarf capital is still erect but the other parts of the gate are on the ground and all three architraves broken two in two pieces the third in three pieces. The small Lion capital with a broken wheel lies near the fallen portion of the gate, and rested formerly on the uppermost architrave, in which there is a slot for the purpose.

The *south gate* is also much ruined; both lion-headed columns are down and broken. The uppermost architrave is broken in two, the two others broken in three pieces.

An Asoka Lât of about three feet diameter lies on one side much broken, and near it a fine Lion capital.

The *eastern gateway*, a cast of which I made in 1869, underwent (for the purpose of obtaining clear moulds) a thorough cleaning, and the sculptures are much improved. The railing at the back of the gate requires setting up. In front of the gate are two broken Asoka columns; the Lion capital which lies near should be set up.

The rebuilding of the fallen railing of the tope and the *western* and *southern* *gateways* will require the superintendence of an engineer and the use of strong lifting apparatus. It might perhaps be possible to obtain the services of an officer from the Bhopal State Railway for the purpose, and I strongly recommend that immediate steps be taken.

The accompanying key plans of the south-west and small gate show what has to be done.

I understand from Major Prideaux, the late Political Agent at Bhopal, that he had arranged with Mr. Mears, the headmaster of the school at Sehore, to superintend the cutting away of the jungle, and he could do everything except the rebuilding of the fallen gates. It would not be difficult to clean the sculptures of the northern gate. A strong solution of soft soap and water is applied to the stone surface, and the lichen and plaster which now covers the carvings made thoroughly soft. It can then be removed with an iron point, and the whole scrubbed out with a hard brush, (made by beating the end of a small bamboo into fibre.) A mason and four natives could clean the northern gate in a few weeks.

Besides the Great Tope there are several other interesting and artistic monuments and buildings on the Sanchi hill. The buildings should be cleaned out, the débris removed and carved stones taken out and placed so as to be easily inspected.

The clearing of jungle, &c., should be put in hand as soon as practicable, and an engineer detailed to estimate the cost of rebuilding the fallen gates. The two thousand rupees sanctioned by the Government of India will not suffice for completing both these works, but Her Highness the Begum of Bhopal has offered, I understand, to render assistance in the way of labour, and this will lessen the expenditure; if, however, a supplementary grant is necessary, I hope that the Government of India will be disposed to sanction any further sum.

Mandu in Malwa.

5th January 1881.

Mandu is reached from Mhow *viâ* Dhar; there is a good metalled road the whole way; total distance about 56 miles. The Mandu buildings are described in Fergusson's *Indian Architecture*, page 540; and the Maharaja of Dhar has defrayed the cost of republishing a short history of Mandu by "A BOMBAY SUBALTERN," which appeared in 1844. The site on which the city of Mandu is placed is about 1,944 feet above the sea, and rises 1,200 feet abruptly above the plains to the south. The view is splendid, and the position of the hill made it a formidable stronghold, which the Hindus retained until driven out by the Muhammadans, who created there an independent Moslem principality up to 1568 A.D., when Akbar annexed it to his dominions.

Sultan Hoshang Ghori, who governed Malwa from 1405 to 1432 A.D., erected all the finest of the Mandu buildings, the present condition of which I will presently describe. When the Mahrattas conquered Malwa in 1732, Mandu, ceasing to be an important city, was deserted, and left to the tender mercies of the vegetation which has covered the whole hill and enveloped the mosques and palaces. The roots of pipul trees show a preference for walls and domes. They force out the stone work in every direction, whilst the *karel* and *adansonia* trees undermine and bulge out massive blocks of masonry and cause their overthrow.

The Maharaja of Dhar has, however, taken steps to preserve the fine monuments of Mandu, and is putting some of the best in repair. More must, however, be done before these magnificent national buildings are rescued from the powerful and prolific vegetation which continues to threaten their destruction. I propose to have a complete survey made of the following structures, and to illustrate their architecture by plans, drawings, and details.

(1) *Rup Mati Palace.*—Vegetation in the roof and walls requires weeding out and the roots removed.

The lower parts of the building are used as dwellings.

(2) *Baz Bahadur ki Mahal.*—The jungle outside this building is very bad The pipal roots have forced their snake-like lengths into walls and domes.

The court-yards require cleaning and clearing of weeds.

The colonnades are used by cattle, and the interior vaulting blackened by smoke and bats.

(3) *Jama Masjid.*—A fine massive building. The east colonnade is almost ruined, and the colonnades on the north and south are badly ruined. The domes over the mosque are covered with vegetation.

The pulpit inside and the niches or "mehrabs" require clearing. They are particularly remarkable and handsome.

The whole place requires vigorous attention in the way of clearing and repair.

The Maharaja's workmen had begun to cut away jungle here, and to execute some small repairs when I visited Mandu.

(4) *Tomb of Sultan Hoshang Shah.*—A handsome massive marble building. The Maharaja is beginning to repair it; the interior is in fair condition, and the tombstone handsomely carved. Beyond the enclosure of the tomb is a curious vaulted corridor.

(5) *Hindola Mahal.*
(6) *Champa Baoli.*
(7) *Jahaz Mahal.*
(8) *Taweli Mahal.*
—A collection of palace buildings, but very much ruined.

The Hindola Mahal is very massive and of singular design. The roof has fallen in and the walls much covered by vegetation.

The Jahaz Mahal is used as an elephant stable, and the Taweli Mahal is occupied by Bhils.

(9) *Chota Jama Masjid*—Is a remarkable building, having been constructed out of the materials of a Jain temple.

It requires much attention in the way of clearing weeds and vegetation.

The colonnades of Jain column resemble these at the Kutb, and are very handsome.

When a general survey has been made of the ruins, the amount of jungle to be cleared can be indicated; and the Maharaja might be asked to undertake to have the work done, and to take simple, but effective, measures for preventing the buildings from falling to the ground.

Near Nalcha, which is between Mandu and Dhar, is a ruined Mahummadan building which Sir Thomas Malcolm converted into a residence. At present it is occupied by Bhils.

Dhar.

The capital of Malwa was formerly Dhar—an old Hindu city, some 23 miles north of Mandu; but nothing remains of its greatness, except two remarkable mosques erected out of Jaina remains.

The Kamal Moola or Jama Masjid has a quadrangle of fine Jain columns, and the domes over the mosque are very fine and elaborate, similar to those in the temples at Mount Abu.

The floor of the mosque is of black stone slabs, from which Sanskrit inscriptions have been effaced. The niches and the pulpit are handsome. Two of the columns supporting the central dome of the mosque have on them a couple of inscribed Sanskrit grammar devices, which show that they were probably part of a scholastic building.

The Lath Masjid.—So named from an iron column which lies in front of it*—is a similar building to the Jama Masjid, but the Jain columns are not so elaborate. The niches or mehrabs and the pulpit are very good. Both these buildings are worthy of illustration, and should be cleaned out and the vegetation removed from the courtyards and from the roofs and domes. This the Maharaja would no doubt cause to be done, if asked.

Both these mosques have Arabic inscriptions over their entrances; and the Judge of the Sudder Court at Dhar has kindly promised to get them copied for me.

Ujain (Malwa).

6th January 1881.

The country of Malwa before the Muhammadan conquest was governed by independent Hindu Rajas. Vicramaditya is said to have flourished about the beginning of the Christian era, and to have founded the city of Ujain, which became a focus of the arts and literature of the Hindus. The ancient city has long since disappeared, but I visited a temple dedicated to Mahadeo,† which is near the site of the old Ujain, and an investigation might result in the discovery of inscriptions. The building is partly earthed up, but still used for worship; its columns are all of a primitive shape, and have the appearance of being very ancient. Drawings would be interesting.

The modern city of Ujain is very picturesque, and has a handsome street of carved wooden houses, one of them being a palace of the Maharaja Scindia.

Drawings of these wooden façades would be an interesting addition to our knowledge of Indian art.

Water Palace near Ujain.—This remarkable Muhammadan residence, which I visited on the 10th December last, is situated on a rocky island in the middle of the Sipri river, about 6 miles to the east of modern Ujain. It is said to have been built by Sultan Nasir-ud-din (1500-1512 A.D.), and is described in the History of Mandu

* This iron column is 9 inches square and has a number of holes through it. Other pieces similar to it are close to the *Hindola Mahal* at Mandu and in front of the Agency Bungalow at Dhar, and I suspect that Mr. Fergusson's surmise (see page 541, of his *History of Indian Architecture*) that it was used for some constructive purpose is correct. The *Hindola Mahal* takes its name from *hindola*—a swing—and this iron bar may possibly have been used for such a purpose!

† Called locally Bhitari Kufar; it is near the Sipri river, about a mile east of modern Ujain.

by "A BOMBAY SUBALTERN," originally published in 1844, and now reprinted by the Maharaja of Dhar. He writes: "The apartments of the palace on the ground floor, eight or nine in number, are lofty and commodious; on the terrace above are several airy chambers and two cupolas, which latter surmount the two principal of the lower apartments.

"Connecting this island with the northern bank there is a stone bridge, below which to the eastward is a causeway composed of slabs of stone and intersected by numerous watercourses, some of which are of spiral form. * * * * In different parts of the causeway are bowers and alcoves, with streams of water passing through the centre, several of the streams running evenly along and then gliding down sloping watercourses: at the extremity of the causeway are some apartments on a level with the bed of the river, but below the surface of the causeway: from these small apartments you see in front a sheet of water falling from above. * * *" The bridge and parts of the causeway are built up of the remains of a Hindu temple; carved fragments appear in several places; and as the place is known as "Kali-Jagga-ka-Mahal, or "Kalideh," the building may have been erected out of the materials of a temple dedicated to "Kali Devi." The building is certainly worthy of illustration by drawings and photography. It was probably designed to follow the example of the water palace at Mandu built by Nasir-ud-din's father Ghias-ud-din, and is a singular instance of Muhammadan ideas of luxuriant and cool residence. The architecture is massive and picturesque. The present condition of the buildings is not good, but I believe the Maharaja Scindia has the intention of executing repairs. I propose to have a survey made of the palace, both for purposes of illustration and to show what should be done.

Note on progress of work at Gwalior, at Sanchi, and at Mandu, dated 18th September 1882.

I visited Gwalior in March last, and found that the Courts of the Man Mandir Palace had been evacuated by the Commissariat, and that cleaning, removal of whitewash, removal of partitions and general repairs had progressed satisfactorily. The Teli-ka-Mandir and two Sas Bahu temples were still in hand, and the repair of their roof and towers progressing. Approaches had been made to some of the old Jaina caves in the face of the rock outside the fort, and Major Keith was busily collecting and arranging fragments of sculpture in the enclosure around the Teli-ka-Mandir Temple. I pointed out to Major Keith that whilst the roofs of the buildings were in need of considerable repairs to render them proof against rain, *restoration* was going on in the way of carving stones, and asked him to complete the structural portions of the roof, leaving uncarved any stones inserted for the security of the building.

2. I wrote to the Resident at Gwalior, and suggested the adoption of regulations for the custody of the buildings, and recommended that the necessary sanction be obtained for the engagement of native custodian as specified in the annexed memorandum:

(1) Names of each building to be cut in the walls, with dates as given in the report of the Director General of the Archæological Survey.

(2) Chowkidars to be appointed for—

(*a*) the Man-mandir Palace, | (*b*) the Teli-ka-Mandir,

(*c*) the two Sas Bahu temples,

with orders to report to the Resident any one disfiguring, defiling, or damaging the buildings.

(3) No lighted fires to be allowed inside the buildings under custody. The chowkidars are to keep the buildings clean, and to report to the Resident any damage from rain or other cause.

(4) A suitable shed or dwelling to be assigned to each chowkidar, so that no damage by smoke of cooking or other fires may occur to any of the buildings under custody.

(5) The orders to the chowkidars to be posted in each building.

3. In May last the Maharaja Sindia contributed a sum of Rs. 4,000 towards the preservative works at Gwalior, and a grant of Rs. 2,500 has been made from Imperial Funds. I have had a series of photographs taken of the Gwalior buildings, and the negatives have been sent home for printing. These shew the condition of the buildings as completed or in progress in August 1882 under Major Keith.

4. Major Keith's report on Gwalior is being printed, and may serve as a guide to the fortress and city.

5. Since the report on Sanchi was written, Mr. Mears, in March 1881, Superintendent of Public Works at Sehore, was deputed to remove jungle from the several ruins; to collect all the carved stone fragments; to repair the great breach in the tope; to remove creepers from the face of the mound; to fill in the shaft sunk in the tope; and to clean the sculptures of the northern gateway. A series of photographs showing the progress of these measures have been taken by Din Dyal, Estimator and Draftsman in Colonel Thomason's Office at Indore, and the negatives will be sent home to be reproduced by some one of the permanent processes.

6. Major Keith is about to proceed to Sanchi this cold weather for the purpose of restoring the fallen gateways and of completing the repair of the tope itself. Sir Lepel Griffin, Agent to the Governor General in Central India, has taken a great personal interest in the works at Sanchi, Mandu and Gwalior, and it is due to his repeated solicitations that Government has consented to contribute grants from Imperial Funds for monuments of importance in Native States, and to appoint Major Keith temporarily, Assistant Curator of Ancient Monuments in Central India.

7. At Mandu the removal of jungle has progressed under the Maharaja of Dhar, and some repairs to buildings have been put in hand. Major Keith will, I hope, be able to superintend some work here this cold season, and an imperial grant of Rs. 2,000, will be made to supplement what the Maharaja agrees to contribute towards the repairs, &c.

8

Report on Monuments in Rajputana, together with a Note on works undertaken.

Notes on Mount Abu, Ajmir, Jaipur, Ulwar, dated 5th July 1881.

Mount Abu Sanitarium.

1. A ride of 14 miles from the Mount Abu road station on the Rajputana State Railway takes one some 4,500 up the hill to the sanitarium of that name. Here are the head quarters of the Agent to the Governor General, Rajputana, and a small convalescent depôt, charmingly situated around the "Nucki-Talao" or Pearl Lake, and surrounded by picturesque rocks and green slopes covered with trees and beautiful vegetation.

Dilwarra Temples.

2. The mountain range rises abruptly from the plains, its scarped peaks varying from 5,000 to 6,000 feet in height. The approach on the eastern side is over a footpath, steep at first, which then winds through a beautiful valley to the station. The celebrated Jaina temples are about 1½ half miles beyond, at the village of Dilwarra. Externally there is nothing to indicate the magnificence of the interiors of these edifices. Two are entirely of white marble said to have been brought from near Chandravati, and for minute carving and profusion of beautiful detail are unrivalled in India. The earlier of the two buildings dates from A.D. 1032, owing its foundation to a merchant, Vimala Sah. The later one was built by two merchant brothers, Tejpala and Vastupala, between A.D. 1197 and 1247. According to Tod, previous to the erection of the Jaina edifices, the immediate spot was occupied by the orthodox divinities Siva and Vishnu, whose ministers would not tolerate the approach of any of the sectarian enemies of their faith. In order to propitiate these, a bribe was offered and accepted. The merchants were accordingly not ungrateful to "Lakshmi," the Hindu goddess of fortune, whom the Jains enshrined in a niche on the right hand of the entrance.

Vimala Sah Temple.

3. This stands isolated in the centre of a quadrangle measuring outside about 190 feet from east to west, and 110 feet from north to south. Along its internal faces are ranges of cells—seventeen on the longer and ten on each of the shorter sides. A double colonnaded piazza elevated four steps above the level of the court passes in front of the cells. In each of the cells is a small altar, on which is placed a crossed-legged figure of Parswanatha. Each group of four columns has either a vaulted or a flat roof. The whole is of pure white marble, every column, dome and altar varying in form and ornament, the richness and delicacy of execution being indescribable. Crossing the pavement in front of the entrance, the mandapam or porch before the sanctuary is reached.

In this the carved columns with their struts and the domed ceiling are covered with flowing and graceful foliated sculpture and by figure subjects from mythology, in which the Brahminic and Jain emblems are curiously blended. The builder has here again testified his gratitude to the propitiated Hindus who gave up their site, by enshrining their goddess Bhavani in the south-west corner of the quadrangle.

4. On leaving the enclosure, one passes to a square chamber with a number of columns supporting a low roof, in which is an equestrian statue of Vimala Sah

surrounded by ten elephants and riders. A good deal of damage has been done to the figures, and is said to have been the work of the iconoclast Aurangzib, who is answerable for the destruction of so many temples throughout India.

5. *Repairs to this building are carried on periodically by the Jains, but they are done clumsily. In order to strengthen broken lintels spanning elaborately-carved pillars, uncouth masonry arches have been in many cases built up between, thus covering large portions of the delicate sculptures with bricks and mortar! This could be remedied by removing the arches and by supporting the stone beams from above with iron joists, and by bolting them together. Many of the damaged carvings have been treated with plaster of Paris! All this might be removed.*

Repairs.

6. The design and arrangement of this shrine are on the model of the preceding, which, however, it surpasses as a whole.

Temple of Tejpala and Vastupala.

It has greater dignity, the fluted columns supporting the mandapam being loftier, and the vaulted interior being fully equal to that in the other in richness of sculpture and superior in the execution, which is freer and in better taste. All the marble is most delicately chiselled. The surrounding cloisters have a profuse variety of ceilings, some with handsome processional bas-reliefs. At the end of the quadrangle is a fine gallery containing elephants and large bas-reliefs of Tejpala and others. In the centre is a model of a temple under a small dome, together with black stone figures of Jaina Tirthankars. *Repairs are executed, but the sculptured marble requires cleansing in the dome of the porch.*

7. This has a handsome entrance, and the sanctuary contains a large brazen image of Parisnath. There is a good deal of unnecessary filling up with bricks and mortar between arches, which might be removed.

Bamsa Sah's Temple.

8 This is said to be the oldest building. The porch or mandapam has a fine dome, and the entrance to the sanctuary is elaborately carved, but dirty.

Simak Sah's Temple.

9. *Plans and detailed illustrations will be prepared of all the Dilwara buildings; meanwhile it will be important to arrange for the cleaning and other remedies here recommended, and to obtain an estimate of cost.*

10. **Ajmir**—The foundation of Ajmir is attributed to the Chohan Prince Ajaypál in the first century of our era.

It is built in a lovely valley, and bounded on the north side by the fine lake "Ana Sagur," which is entirely surrounded by hills, and on the west by the lofty Taragarh with its fortress. The town is enclosed by ramparts, built by the Emperor Jehangir, the walls of which communicate with the citadel of Taragarh. Colonel Tod in his *Rajasthan* says—"Ajmir has been too long the haunt of Moghals and Pathans, the Goths and Vandals of Rajasthan, to afford much scope to the antiquary." It has, however, one ancient building in the "Arhai-din-ka-Jhopra," or shed of *two and a half days,*" which was constructed out of a prostrated Jain temple by Altamsh in A.D. 1236. General Cunningham believes that most of the buildings which furnished materials for the erection of the great mosque must have been prepared and carved during the eleventh and twelfth centuries.

The Arhai-din-ka-Jhopra.

11. The appearance of the old ruin is very picturesque, and the whole of the face of the mosque is covered with a network of sculptures. The interior pillars are not so irregularly placed one above the other as in the converted mosques at the Kutb, in Malwa and in Ahmedabad; but, as Fergusson says, "if they were

taken down by the Muhammadans, they certainly have been re-erected exactly as they were originally designed to stand."

12. The pillars have greater height than those at the Kutb, and are more elegant in their sculptures and general appearance.

13. The attention of the Agent to the Governor-General in Rajputana was first drawn by the Government of India in June 1874 to the ruined state of the building.

14. An estimate was submitted in May 1875, and sanctioned in August of that year. The resetting of the arches of the façade, fresh paving, setting up columns, repairs to the roof and the renewal of a dome in the south wing were completed. A further estimate for repairs was sanctioned in April 1878.

15. Fortunately a proposal to pull down the entrance to the mosque enclosure was put a stop to by the Agent to the Governor-General (then Mr. A. C. Lyall) and the Commissioner of Ajmir (Mr. L. Saunders).

16. *It now remains to clean the sculptures of the mosque, which can be done with strong soap and water or with a solution of soda. Hard brushes made of bambu beaten out at one end will remove ordinary crustation, but hard pieces of plaster or dirt should be carefully removed with an iron point. One dome to the south of the mosque is still open and admits rain; and as many of the pieces of masonry are in existence, I strongly recommend restoration. It will be necessary to have estimates framed of the cost of these measures.*

The Daolat Bagh.

17. The beauty of the lake "Ana Sagar" made it a favourite resort of the Moghal Emperors, and the valley became filled with their palaces and gardens. "One of the most beautiful," says Rousselet, "is the Daolat Bagh, or Garden of Splendour," which was built in the sixteenth century by the Emperor Jahangir, and now serves as the abode of the Commissioner. Elegant marble pavilions stand on the very edge of the lake, and command the incomparable view of the town, and the mountain is reflected as in a crystal mirror. The garden itself is of great extent, and full of venerable trees, beneath whose shade the haughty Jahangir received the Ambassador of an English Sovereign.

18. Colonel Tod in 1829 writes :—"The gardens erected on the embankment of the lake must have been a pleasant abode for the 'King of the World,' whilst his lieutenants were carrying on the war against the Rana; but the imperial residence of marble in which he received the submissions of that prince, through his grandson and the first Ambassador sent by England to the Mogul, are now going fast into decay. The walks on which His Majesty last paraded in the State coach sent by our James the First are now overgrown with shrubs." (See Tod's *Rajasthan.*)

Condition of the buildings.

19. One of the pavilions with marble pillars is used as a library, another as an municipal meeting-room; *but the architecture is so spoilt by enclosing walls, that it is difficult to realise what the buildings were like. I think all should be opened out and repaired. The buildings might still be used for sitting in, and if fitted with suitable purdahs would be more agreeable as places of meeting than they are now. Their present treatment I consider distinctly vandalistic.* Estimates for the measures suggested will be necessary.

Bazaar buildings.

20. *Ajmir Town Buildings.*—Ajmir possesses beautiful bazaar buildings with much material for an artist and architect; I propose later on to send some draftsmen to make drawings of ornamental details of the best specimens of Rajput art.

21. The shrine of Khoja Syad at the extremity of a long bazaar which runs from one end of the town to the other is a great court paved with white polished marble and filled with buildings, tombs, mosques, and the mausoleum of the Syad occupies the centre. The saint was born in the year 1132 A.D., and was the first missionary of the Koran to Ajmir. Jahangir in 1610 A.D., built the mausoleum to his memory. Drawings of this and the older surrounding buildings would be of value.

Shrine of Khoja Syad.

Illustrations required.

22. **Jaipur.**—The parent city of the present Jaipur State was founded by one Dhola Ram in A.D. 967, when he and his Kachhwaha Rajputs conquered Amber from the Minas, and transferred their capital from Kho to Amber. In A.D. 1580 the Raja, Man Sing, began the present palace, uniting it with the feudal stronghold of the first rulers, portions of whose buildings may be still seen behind the zenana. About A.D. 1630 the Raja, Jai Singh I., added the "Jess Mandar," the Diwan-i-Khas, and several other palaces, enclosing the whole within a fortified wall. He also made the lake of Tal Koutara by crossing the ravine with a bund, on which he planted gardens and erected pavilions. In A.D. 1699 Sowai Jai Singh II. constructed the fine Ganes Gateway, but the position of Amber, with its inaccessibility and want of room for enlargement, led to the removal of the capital, and in A.D. 1728 Sowai Singh founded the modern city of Jaipur.

Amber.

23. On the occasion of my visit, Major Jacob kindly accompanied me to Amber and showed me over the palace. The approach from Jaipur is most picturesque: gardens, ruined palaces, and buildings line the road which passes up the valley formed by the Kali Kho mountains and, ascending over the ridge, winds down to the vale of Amber and to the Tal Koutara Lake. The Amber Palace is about 100 feet above the water level, and from the upper plateau a grand view is obtained of the old town buildings, which fill up the north-east part of the valley. "Nothing," says Fergusson, "can be more picturesque than the way in which the palace grows, as it were, out of a rocky base or reflects itself in the mirror of the deep lake at its base, and nothing can be happier than the mode in which the principal apartments are arranged so as to afford views over the lake and the country beyond." An excellent description of the various palace buildings is given in chapter XX of Rousselet's *India and its Native Princes*, but a further and more detailed account is better reserved until I have, with the Maharaja's consent, completely surveyed the palace.

Amber Palace.

24. The Diwan-i-Khas is a singularly handsome building. Its outer row of columns is of red sandstone finely sculptured but the *on dit* is, that to appease the jealousy of the Emperor Jehangir, *the carvings were covered with stucco, the removal of which would be unbecoming taste and an act of mercy.*

Diwan-i-Khas.

25. Passing through the beautiful Ganes Gate the private gardens of the palace are entered. On the left hand side is the fine pavilion of the Jess Mandar, the exterior of which is of white marble ornamented with bas-reliefs The interior is divided into three apartments surrounded by a verandah, and the walls are covered with beautiful mosaics and inlaid work. The *shish* or mirror work is most elaborate and sparkling, and its application to the Moorish pendentives of the ceilings is strikingly clever. *The upper pavilions are also tastefully decorated, and have some beautiful wooden doors, which should be repaired and not allowed to fall into ruin.*

26. The pavilion over the Ganes Gate has also doors worthy of preservation. On the other side of the garden are several palace buildings, with the remains of coloured mural decorations and doors of inlaid ivory and sandalwood. *The whole of these relics of mediæval art should, as far as possible, be rescued from neglect.* In one apartment the walls are painted in frescoe, with representations of Benares, Muttra, and Bindraban. These are unique of their kind, and furnish some evidence of the original designs of buildings that have since fallen to ruin. I here discovered the Temple of Govind Deva at Bindraban, the restoration of which has excited so much speculation as to the form of its roof. *The frescoes should be carefully freed of dirt and dust, and covered with a hard transparent varnish such as used for pictures. All the beautiful marquetry doors that remain in the palace should, as far as possible, be preserved* in situ, *or else placed in those apartments to which visitors are allowed access.*

27. *The woodwork should be repaired and kept from cracking by careful dry rubbing with vegetable oil.*

Jaipur Modern Town.

28. The modern town of Jaipur is surrounded by high walls and laid out with regularity. It is remarkable for the wideness of its streets, and from east to west is over 2 miles in length; in breadth it is about 1¼ miles. The buildings which line the principal streets have considerable pretensions to architectural effect, but the Maharaja's palace, with its pleasure gardens occupying one-seventh of the whole area of the walled city, contains the most remarkable monuments.

29. Some of the older buildings of Jai Singh's time are quaintly decorated with coloured tiles, and together with the wonderful astronomical observatory are well worthy of being preserved from destruction.

30. The more modern *shish* or mirror decorations of the various pavilions, although brilliant and effective, do not compare with the older work at Amber for elegance and refinement in design. It seems, indeed, a pity that the wealth of Indian decorative art is not employed throughout the palace in place of the third rate devises of English upholstery.

Palace

31. During my visit to the palace I had the advantage of seeing the armoury, conducted by Dr. Hendley, and I hope that he will succeed in the proposal to rearrange the beautiful arms, so as to be well seen, and in carrying out the project for the formation of a museum of Indian art in Jaipur.

Palace collections.

32. There are in the palace a large number of beautiful objects that seem uncared for and undervalued, from which a nucleus could be formed of an invaluable collection.

Palace carpets.

33. Some fine old carpets which I saw heaped in the palace stores were in danger of being cut up and sent to England. I understand they date back as early as the time of Akbar. Fortunately Colonel Beynon recognised their value in time, and it is to be hoped that they will be allowed by the Maharaja to serve as patterns for the weavers of this country instead of for the looms of Kidderminster.

34. **Ulwar.**—Ulwar is said to have been first mentioned by Ferishtah, who alludes to a Rajput of Ulwar contending with the Ajmir Rajputs in A.D. 1195. The city has several buildings of note, although not of great antiquity. The palace, built by Banni Singh, is a picturesque specimen of Rajput architecture, and is in parts worthy of illustration.

Palace worthy of illustration.

35. M. Rousselet says of the palace:—

"The interior of the palace is very simple and ornamented with great taste, with the exception of a few apartments furnished in the European style, where are collected a heterogenous mass of furniture and other articles from our manufactories, which are the admiration of the natives. The architect's plan for doing without stairs is an excellent one, particularly in this enervating country. The palace has as many as three or four stories, all of which, reached by means of gently-inclined corridors, prevent the ascent from being fatiguing; and, like most of the palaces in India, it contains a *shish* mahal or chamber of crystals, in which are aggregated all the richest of decorations and mosaics. There is a great difference between modern art and the wonderful architecture of Amber, or even of Rajgarh; but still the decorations here are extremely artistic and of indescribable wealth and richness."

36. *Mausoleum of Baktawar Singh.*—The mausoleum of Baktawar Singh is a handsome-domed building of white marble, and resembles the chuttries at Goverdhun built by the Bhurtpur Chiefs in the last century. The Hindus adopted the idea of enshrining the ashes of their dead from the tomb-building Moslems, and the "chuttries" of Rajputana are often handsome and skilful specimens of architecture. *The Baktawar Singh building is certainly worthy of illustration by plans and details, and merits preservative measures.*

Illustration wanted.

37. Not far distant from the Ulwar Railway station is a fine Mussalman tomb dating A.D. 1547, known as Fateh Jhang's. It is singular in construction, having a set of three ranges of open colonnades, one above the other, surrounding a lofty square apartment with a handsome dome. *The masonry walls are covered with plaster, decorated in parts with handsome incised ornaments, and with coloured tiles. The enclosure requires cleaning out, and the trees, whose roots are destroying the terraces of the tomb and its adjacent mosque, should be removed.*

Fateh Jhang's Tomb.

38. *The windows of the tomb have been closed with masonry, and the interior chamber is thereby darkened. They should be opened out, and to prevent the ingress of bats, a wire-gauze screen fitted to each opening. The vegetation on the roof and dome should also be removed.*

39. There is a somewhat similar building at Ulwar called the Khan Khana, but it remains unfinished.

Khan Khana.

40. Banni Singh was a patron of art, and employed skilled artisans and painters in his palace. His library was stocked at great cost, and a splendidly illuminated copy of the *Gulistan* is valued at Rs. 50,000. This book was lent by the present Maharaja to the Exhibition of Native Art held at Simla in 1879, and its leather embossed and gilt binding, executed in the Ulwar Palace, excited very great admiration. It seems a pity that this art of binding should not be more extensively cultivated at Ulwar.

Palace Library.

Extract from a Memorandum on the Palace at Amber, addressed to the Resident at Jaipur, dated 18th August 1882.

* * * * * * *

4. In the spring of last year (1881) I visited Jaipur and other places of interest in Rajputana, and subsequently submitted a preliminary report, copies of which were circulated by the Supreme Government to the Agent to the Governor General.

5. In this report I noticed in general terms the condition of the interesting Palace at Amber, which takes high rank among the Hindu palaces that now remain in India. I ventured to suggest some remedies which seemed to me to deserve the attention of His Highness the Maharaja of Jaipur, but having to-day re-visited Amber, I beg to make the following supplementary observations in the hopes of his becoming sufficiently interested to pass definite orders.

6. In the preliminary report on the Amber Palace, I omitted to mention two very important points in connection with the condition of the structures :

(1) Chujjas are broken in several places in the façade facing Amber, and some of the trellis windows are damaged and broken.

(2) The Jai Mandir is surrounded by a verandah of iron posts and corrugated iron sheets. This seems to me to be an utterly unsuitable feature to append to a marble building of Indian architecture. It is a disfigurement by reason of its hiding the upper part of the building, and is by reason of its material more suited to a temperate climate than to a tropical one. Its removal appears to me the only remedy for doing justice to the pavilion, and for giving the necessary light to the interior, decorated as it is with singularly beautiful mirror decorations.

7. I now discover from my inspection of to-day that shortly before the Viceroy's visit last year to Jaipur, many of the palace walls were covered with whitewash, and I regret to observe that the beautiful Diwan-i-Khas did not escape this operation.

8. Whitewash is, I submit, a material which is only properly used to cover mud walls or plastered masonry, but to apply it to stone-work of architectural beauty, is to offend every accepted cannon of good taste.

9. I cannot too strongly advocate the extensive removal of whitewash from all *bonâ fide* masonry or marble.

10. I also commend to notice the desirability of cleansing the marble roof and domes of the Jai Mandir which have become stained and blackened by weather.

11. A pair of marquetry doors taken from the zenana rooms are now deposited in the Jaipur Museum, but I would mention that an order of the Maharaja's Council passed last year decided to keep all the carved and ornamented doors of the Amber Palace *in the palace*. I therefore recommend that the doors be returned to Amber, and that these, together with those that still remain, be repaired and renovated in order to preserve the tradition of a beautiful art in its original home. In the printed report alluded to, I took occasion to mention the frescoes in the room off the Sukh Mandir. I now regret to state that their deterioration is accelerated by the leakage of rain, which dampens the walls and discolors the paintings. *Finally, I cannot too strongly recommend that the repairs of the Amber Palace be thoroughly carried out in the interests of India, and as one of her national monuments.*

Notes on Udaipur, Ahar, Nagda, and Chittor, dated 13th September 1882.

1. Not the least of the many charms of Kashmir is to be found in its picturesque buildings, whilst the surroundings of rugged cliff, snow-capped ranges, wooded glens, winding river and rushing torrent, combine in a thousand ways to enhance the beauty and solemnity of the ancient ruins. In Kashmir we have the wildness of the hills and the valleys as a contrast to its massive and early temple architecture. Here and there, it is true, the refinement of the Moguls reveals itself in gardens and fountains, such as those of the Shahlimar, on the city lake at Srinagar; but the prevailing elements of contrast in the valley are the grand and massive monuments of man set around with all the resources and beauties of wild nature. Conditions such as these infuse a rare flavour into the old architecture of Kashmir, and render it almost impossible of repetition elsewhere.

2. Although it possesses a wholly different style and far more elaborate sculpture, Udaipur has all such advantages. It has architecture, picturesque and elaborate to an extent which I had not before appreciated. It has beautiful scenery, such as unfolds itself out of mountain, slope and field, and the vast areas of artificial water which cover the country are features in landscape gardening on the largest scale that I know of. Udaipur was founded by Rana Udai Singh in 1568, and he conceived and carried out the idea of creating an artificial lake, on the margin of which to build a palace The Arvali mountains, the great feature of Meywar, surround the locality, and by raising a dyke or bund across the beautiful valley, streams were dammed up to form the "Pachola Sagar." The city is situated on an elevated strip of ground parallel to the shore of the lake, and crowning the ridge stands the palace over 100 feet in height. This pile of stone and marble, which has grown by the various additions of successive Ranas, is most picturesque and imposing. In the midst of the lake, which it overlooks, stand the two water palaces, the Jagmandir and Jagnawas, and but for their domes and kiosques, the view from the palace terraces reminds one more of Windermere and Ullswater than of an Eastern country. The artificial lakes of Meywar are not only useful works on a large scale, but are most beautiful adjuncts to the mixed scene of wild hill, gentle pastures and wooded slope. They fertilize the surrounding fields, their masonry dykes are often covered with elaborate marble sculptures, and their waters reflect and set off the beautiful Rajput temples and buildings generally found on their shores.

3. The temple architecture is that known as the Jaina style, and the porches and sanctuaries are all on one general plan, although the variety and fertility in resource displayed in the roofs or sikras, the graceful ornamentation applied to columns, the wonderful intricacy of the patterned ceilings, and the beautiful decorative friezes of figures which cover the external walls, strike one as full of marvellous variety.

4. On the other hand, the secular architecture of the palace, dwellings of the Meywar nobility and city houses, is plainer, but the buildings are planned on all conceivable lines, and their general effect is picturesque to a degree. The style, although using the pointed arches and the cusped openings which found favour in the Imperial buildings of Delhi and Agra, retains the individualities of Rajput architecture, *i.e.*, dignity and repose.

5. Udaipur presents an imposing appearance when approached along the road from Nimbahera, and on the afternoon of the 30th July I had a first impression of the city in the distance, as I drove into the valley towards the Residency. The

palace of the Maharana, the temples, houses of the Thakurs, and dwellings and walls of the city combined to form a picturesque outline against the Arvali Hills beyond. Arrived at Udaipur, I became the guest of the Acting Resident, Lieutenant-Colonel Euan Smith, and after he had presented me to His Highness the Maharana, the most admirable and complete arrangements enabled me to see everything of interest in Udaipur itself, at Ahar, at Eklingi and at Nagda in the immediate neighbourhood.

6. On the 31st July Colonel Euan Smith took me to see the Maharana at his palace, and here it was that I had a first view over the lovely "Pachola Sagar." Nothing is visible of this beautiful lake until one gains the crest of the ridge of high ground, previously mentioned as the site of the palace and city. Driving in at a fine old gateway, the principal street, lined with quaint shops, leads one up an incline to the gates and range of lofty buildings, forming the Maharana's palace. Passing these, we alighted at a modern villa built by the present Maharana, and here it was that His Highness received us, and that the lake and its island palaces burst into view to the west. During the interview the Maharana, on becoming acquainted with the object of my visit, expressed himself in favour of preserving the antiquities and architectural monuments of his country, and said he would be willing to receive suggestions on the subject of repairs, and to allow any works undertaken by him to be supervised by an officer appointed by Government. His Highness has not only great appreciation for the beauties of nature, being justly proud of Udaipur and its beautiful scenery, but has great taste in matters of art, and has already done much to improve and renovate the old palace buildings both at Udaipur and at his ancestral stronghold on the Chittore Hill. Unlike the Mahratta and Moslem rulers of other States, who came as conquerors into possession of all classes of ancient remains, he looks with pride on the historical monuments of Meywar which perpetuate the traditions of deeds extending through a dynasty of over 1,000 years duration. Early on the morning of the 1st August I was permitted to visit the palace buildings, and was conducted by the "Kavi Raja" Shamul Dass, one of His Highness's Members of Council and Court historian or bard. In the afternoon I visited the island palaces of "Jagmandir" and "Jagnawas." On the morning of the 2nd August I visited the chattries or cenotaphs of the Maharanas of Udaipur at Ahar, with Mr. Wingate, C.S., Settlement Officer in Meywar, who was good enough to show me the place. In the afternoon I went to see the city temples and re-visited the island palaces.

7. On the 3rd August, Shamul Dass showed me for a second time over the palace buildings, my notes on which I desired to verify and correct. On the 4th August, His Highness most kindly made a collection at his palace of his arms, shields, lances, swords, daggers, ivories, enamels, &c., and permitted me to select some for photography. On the 5th August, Colonel Euan Smith, Mr. Wingate and I rode out some 12 miles to Eklingi and Nagda, where I had an opportunity of seeing the fine Hindu and Jain temples of those ancient localities. On the 7th, I left Udaipur for Chittore, and inspected the numerous buildings in the fortress on the 8th and 9th August. The following are the points I noticed in the various buildings visited, and what I think should be done to ameliorate their condition and secure their preservation.

8. **Palace at Udaipur.**—This pile of buildings* has been described as standing on an elevated piece of ground above the city, and with a fine view to the west over the artificial waters of the "Pachola Sagar." The first gateway† leading from the city was built by Partab Singh in A.D. 1594; beyond this is a handsome triple doorway‡ or Tirpolia

* See photograph.
† See photograph.
‡ See photograph.

built by Sangram Singh in A.D. 1711, and to the left or west of the intervening courtyard are a set of 8 "Torns" * (or sculptured archways supported by masonry shafts) erected and used by various Maharanas for the distribution of largesse by the weighing of their persons against gold and silver coin.

* See photograph.

9. Passing under the "Tirpolia" one comes in view of the picturesque western façade of the palace range.† The Bari Mahal or Great Court is nearest on the right or east. It was completed about A.D. 1597 by Amara Singh II, and has a handsome superstructure of marble fancifully wrought into corbelled windows and trellis screens. This superstructure or upper storey rests on a handsome string course of marble carved with bas-reliefs of elephants. The wall below this is, however, of white-washed masonry, *and would be greatly improved by cleaning to show the natural colour of the stone.* I should here mention that the Maharana has given me permission to have a plan made of all the various apartments, courts, &c., of the palace, and that these notes are preparatory only until the plans can be referred to and a more comprehensive monograph prepared in reference to them, and to the photographs now in course of being taken. I therefore will here content myself with briefly mentioning those parts of the palace to which Shamul Dass conducted me, and in the order of our progress.

† See photograph.

10. The whole of the western façade of the building is extremely picturesque and full of variety, and is confronted by a long terrace and colonnade, under which are kept the Rana's elephants. Passing up a flight of steps at the south end of the palace, we entered through a doorway and made our way to the "Khush Mahal,"‡ built in A.D. 1844 by Suruf Singh, now used for audiences and Council meetings, and consisting of a small courtyard with a colonnade at one end supporting that peculiar cusped form of arch adopted by the Rajputs of Meywar. We next came to the "Karn Belas,"§ built before A.D. 1616, a courtyard surrounded by a colonnade of pillars and a flattened edition of the cusped arch noted above. On the roof of the colonnade is a curious metal astronomical instrument, and from this spot one obtains a good view to the east, over the lake, and to the west, of the rear façade of the "Bari Mahal," the lower part of which here visible was commenced by Amara Singh I in A.D. 1597. Below the Karn Belas are a set of apartments, with elegant windows overlooking the lake, but the rooms are too small for modern ideas of comfort, and now occupied by lumber.

‡ See photograph.

§ See photograph.

11. The upper storey of the "Bari Mahal" is an open garden surrounded by marble trellis, kiosques and pavilions, with some handsome doors inlaid with ivory. In the centre of the court is a tank encased with huge slabs of marble.

See photographs.

12. The Bari Mahal, also called the Amar Belas, was completed by Amara Singh II in A.D. 1711. There are numerous carved wooden doors worthy of illustration, and some curious slabs of marble, measuring 3 feet square, cut with water channels in geometric devices. Handsome pavilions crown the upper terrace of this palace building, and their domes are decorated inside and out with ornamental carvings.

See photographs.

13. Adjoining this is the "Dilkushal," built by Karn Singh, and decorated with mirror work of painted and gilt back grounds. An adjacent pavilion, built A.D. 1711,

See photographs.

is covered with blue and gold porcelain tiles of Chinese make. Mixed up with these are some quaint Dutch porcelain tiles.

14. The *Chini-ki-Chittre Sali*, built in A.D. 1716 by Sangram Singh II, consists of a court and pavilion with finely inlaid mirror work, with flowers, &c., on a ground of plaster. One small room is entirely covered with the Dutch tiles noticed above, the subjects being skating scenes, windmills, boats, biblical scenes, &c. The walls of another small room are faced with dark blue and gold tiles of Chinese porcelain. The *Moti Mahal*, built in A.D. 1828, is decorated with mirrors and coloured pictures. Below this is the *Choti Chittre Sali*, a court with walls inlaid with brilliant mirror mosaics of peacocks. Off this is a small pavilion with a medallion of the Rajput sun, and below a dado of curious raised and coloured plaster. A pair of smal doorways, with coloured wooden figures in relief of Native and European men and women, lead to the *Pitum Nawas*, or Palace of Delight, decorated with glass and porcelain. A resplendent mirror throne projects over the court of the Moti Mahal. The *Manak Chand*, made in 1857, is a most curious apartment, the walls of which have a series of glazed niches filled with all kinds of English China figures and vases of Bohemian glass. The *Raiun Ungan*, dating from A.D. 1571, is a handsome old court and pavilion with some solid Hindu columns. *The walls of the courtyard are pierced with stone screens, and the whole is whitewashed, which is a pity.* In the centre of the floor of the pavilion is a square of coloured marble mosaic which points to a possible origin of the Agra work. From this one mounts up to the *Chandre* (*or moon*) *Mahal*, from which a good view is obtained of the lake. Chobs and processional palms are stored in this building, which has some well-designed ivory doors.

See photographs.

See photographs.

See photographs.

15. The foregoing compose the principal portions of the first range of palace buildings; next to it is a lofty but plain structure accommodating the zenana; and beyond this to the south is the "*Kumar Pudar-ki-Mahal*"—a picturesque two-storeyed erection of Karn Singh's time, A.D. 1616. *This is unfortunately much spoilt in appearance by whitewash.* Beyond this again to the south is the modern villa of the Maharanas, below which and to the east is a pretty garden and modern pavilions in the Rajput style. Descending the ridge towards the lake we now came to a range of palace buildings on its margin.

See photographs.

16. The *Akhara Mahal*, or Court for Athletes, has at its northern end a raised terrace with square slabs of marble cut with water channels in intricate geometric devices. In the wall at the back of this terrace is a window surrounded with porcelain plates, and the walls of a small apartment off the terrace are faced entirely with porcelain plates of the old willow pattern, the effect of which is very good. Near to this is the *Himlat Belas* built by Bhim Singh in Colonel Tod's time, with some English pictures on its walls; beyond to the north is the *Jalnawaz* or Fountain Palace, built by Jawan Singh in 1828, with steps down to the lake, and some fine mirror mosaics on its walls at the back *which are worth renovating and preventing from peeling away.* This completed my tour of the Udaipur Palace, and I am greatly indebted to Shamul Dass for the trouble he took to show me round and give information.

17. **Jagnawas Palace.**—This island palace was commenced by Jagat Singh about A.D. 1623, and is a collection of small apartments, courts and gardens, which afford the Maharana a pleasant retreat at certain seasons of the year. Viewed from the shores of the lake and on approaching it by water, its pinnacles and

See photographs.

domes make an effective and varied outline. On landing I found that numbers of workmen were renovating portions of the buildings. The *Sujjun Belas*, now nearly complete, has been almost entirely rebuilt, and some mirror decorations in pavilions flanking a tank for bathing are in excellent Native taste. The *Sumbhu Palace* is a modern classical villa built by His Highness's predecessor, and not in the best harmony with the oriental surroundings. The *Naker-ki-Mahal*, or Water Garden, has deep channels of masonry surrounding flower beds and palms, and some pavilions of great beauty decorated with mosaics of glass which it is to be hoped the Maharana will preserve. Some old shish arabesques of the same character, but of great elegance and refined taste, cover the walls of the garden of the *Khush Mahal*. *Unfortunately the damp has caused them to become loosened from the wall, and great skill and care will be needful to repair them.* The *Bari Mahal* is a largish open court with a handsome pavilion to the south, and some coloured frescoes of elephants adorn the lower portions of the walls of the courtyard. The *Dil Aram* is a small garden with an open colonnade facing the lake towards the Udaipur Palace. Here, again, mirror decorations are used to ornament the walls, *and well deserve to be kept in repair.*

18. **The Jagmandir Palace.**—Jaggat Singh commenced this about A.D. 1623, and built the domed pavilion or Gúl Mahal which was occupied by the fugitive Prince Kurram, afterwards the Emperor Shahjahan. The rest of the gardens, pavilions and courts were built by Sangram Singh. The *Gúl Mahal* is the principal building on the island, and in fair order, extensive repairs having been executed. The terrace confronting it has, however, sunk and given way in parts, *and being of marble slabs is worth while to relay and raise on concrete above the flood level of the lake.* The interior of this building is decorated with some bold mosaics in jasper, agate and onyx, and I cannot but think that Shahjahan got the idea of adorning the Taj with such work from his residence on the Jagmandir island. Be this as it may, the Udaipur mosaic is bold and on a larger scale of pattern than the elegant foliated panels of Pietra Dura that cover the Taj, whilst the tomb of Shahjahan's father at Shahdara, Lahore, built shortly after Shahjahan's flight to Udaipur, has mosaics more like those of the Gúl Mahal in the scale of pattern. The repairs to the Gúl Mahal have so far been efficacious in keeping out rain and preserving the building, but the heavy pointing in plaster introduces an objectionable network of white lines into the exterior of the walls and domes. In both island palaces it struck me that the palms, shrubs and trees had been allowed to outgrow themselves, and by so doing obscure the buildings.

See photographs.

19. **Udaipur City.**—On leaving the Udaipur Residency the city is entered by a double gateway of bold and effective design; the domestic architecture which one sees in great variety on the way to the palace is full of interest and suggestion, and would anywhere else be remarkable, but the palace buildings and those on the island of the lake put all else in the shade. There are, however, several remarkable temples, the principal one having been built by Jaggat Singh II in A.D. 1734. Although so modern in date, it preserves all the main characteristics of the ancient Jain temples of Meywar. It possesses a fine porch and lofty sanctuary covered with bold figure friezes and architectural ornament and is confronted by a handsome shrine containing a large brazen image of Garuda, whilst flanking this to the north and south are small and well conceived temples dedicated to Ganesh and Mahadeo. *Whitewash, which seems now-a-days to be so much in fashion, mars many of the sculptured enrichments of the buildings, and I cannot too strongly advocate its complete removal.*

See photograph.

See photograph.

20. **Ahar.**—The small hamlet of Ahar, two miles to the east of Udaipur, is the interesting ancient site of the city of Ahar. Fragments of carved stone are found in the village walls and buildings, notably in some Jain temples. Near the road is a small and highly sculptured temple said to have been erected under the auspices of Míra Baie. It stands isolated in an enclosure and is much ruined, the sculptures having been mutilated and covered up with plaster by Alamgir. Some little distance beyond the village are the chuttris or cenotaphs of the Maharanas of Udaipur and other notables of Meywar. The *Chuttri of Amar Singh II* is a fine large structure, *but vegetation is doing damage to the roof, dome and terrace. A large tree has grown up close to a corner of the latter, and unless removed will sooner or later upheave the masonry. Sangram Singh's chuttri* is also a fine building, but was never finished. *Vegetation requires to be removed.* This is one of the largest of the cenotaphs and has some handsome friezes of sculptures. *Amar Singh I's* chuttri is covered with vegetation. Near this is a small cenotaph of the son of *Udai Singh I*, but its sculptures have been mutilated. *The whole enclosure or graveyard is greatly overgrown with vegetation and trees, and might easily be laid out and set in order.*

See photographs.

See photograph.

See photograph.

See photograph.

See photograph.

21. **Nagda and Eklingji.**—Nagda, 12 miles north of Udaipur, is said to have been founded by Bappa early in the 8th century, and close to it is the temple village of Eklingji, also connected with the early life of this first of the Meywar Ranas. The antiquities of the locality are therefore at least historically important. From the accompanying diagram the position of the temples at Nagda and Eklingji will be understood. The lake which separates the two villages is one of the many artificial waters which beautify the Udaipur valley and is surrounded with wooded hills. The most interesting ancient structures at Nagda are two temples called the "Sas Bahu" Their position is shown at A and B. Both are in the first rank as specimens of Jaina architecture, and are exceedingly ornate and comparatively perfect. There are no inscriptions to give any account of these remarkable monuments, but I imagine that they are both anterior to the 11th century, and that B is earlier than A. *Recent damage has been done to both by chipping off faces, &c., of figures, and should, I submit, be rendered impossible by enclosing the locality and by custody.*

22. The rough plans explain their arrangement. *In A the roof of the porch and tower of the sanctuary should be cleared of vegetation.* The mullioned windows *f* and *g* with their carved geometric tracery and figure carvings are exceedingly fine. The porch *a b c d* is even more elaborate and finely sculptured and in unquestionable taste. The interior of the porch has four handsome columns supporting an elaborate dome; the ceilings throughout are of great diversity of design and curiously honeycombed. The temple appears to have been at one time dedicated to Vishnu, there being near the sanctuary a recumbent figure of that god on a snake in black marble.—(Vishnu and Lakshmi on Ananta.) *The exterior carvings would be greatly improved by being cleaned, but the interiors of the porch and sanctuary are blackened by smoke, dirt and bats, the dung of which covers the floor, and should be thoroughly cleansed.*

See photograph.

In B the roofs also require weeding of creepers. The porch **h k l m n o** *is handsome and its carvings are worth cleaning.* The range of four columns at C have the appearance at a distance of being Grecian, but on examination it is seen that they are

See photographs.

fashioned on the orthodox Hindu plan of varying the sections of the shaft from the square and polygon to the circle. A ruined temple at C in the sketch diagram is surrounded by water and the lotus plant.

See photograph.

23. Near this are two Jaina temples D and F, the former built in A.D. 1448 by the Khumbo Rana. Neither call for any special remark. Beyond these at G is a temple and porch which has an ancient look. Close to the causeway at the north end of the lake are two small temples H and K. The smaller one H is apparently the older, and is handsomely sculptured. A figure of Vishnu is in the sanctuary above the causeway; to the east are several temples L M N O; that at L being a large Jain one.

See photographs.

They all want clearing of dirt and jungle.

24. The groups of temples at Eklingji are held very sacred. Two of them at P and Q are solidly built of masonry and covered with carvings. P is partially damaged by whitewash. Q is said to have been built by Mira Baie.

25. **Chittore.**—Chittore is over 60 miles north-east of Udaipur. The Malwa branch of the Rajputana-Malwa Railway passes a little over a mile from the present town, above which the ancient fortress towers as a hill mass 500 feet above the plain, and over 3 miles long by half a mile wide. The ascent, which begins from the town, is a mile to the upper gate, with a slope of about 1 in 15. The buildings here noted on are in the order pointed out to me by the kiladar, who was my guide.

26. The *Sengar Chaori* is a very elaborate building. Although the dome is now plain and unornamented outside, the interior is finished in one of the most beautiful styles of Jain architecture; in the centre is a canopied masonry dais or "chabutra" on which the enthronement of each of the Ranas is said to have taken place. The bas-relief of the exterior walls are exceedingly bold and effective, and the building is, both from historical and architectural points of view, well worth preserving. *The massive masonry walls which have been built up to both sides of the building cut it in half. Their removal would be a great improvement. The carvings inside and out require cleaning, and all vegetation should be removed from the roof and walls.*

See photographs

27. The great palace of the Rana, or *Bara Mahal,* is a plain building, but in excellent taste, and in course of being renovated for the use of the present Maharana.

28. A group of elaborately carved Jain temples known as the *satis* (27) *Dewal-ki-Mandir* should be preserved. *Some of the masonry structures require strengthening, and the weeds and creepers which cover the enclosure and walls should be outrooted.* Near to this are two other *Jain temples* with very handsome exterior carvings. *Vegetation should be here thoroughly cleared away and the sculptures cleaned.*

See photographs.

See photographs.

29. Next comes the so-called *Mira Baie* Temple with its curious interior arrangement of columns. Its tower or sikra is all of stone and very handsome. *The masonry walls to the north of the building are much damaged by trees which it would be as well to destroy. There is a good deal of injurious vegetation elsewhere in the building.*

See photographs.

30. The *Tower of Victory* built by the Khumbo Rana, one of the most powerful Ranas of Meywar, is the striking monument of Chittorgarh. It was erected about the middle of the 15th century during a revival of Jain architecture. The nine storeys composing this exceedingly interesting tower are covered inside and out with sculptures of great beauty. The arrangement of the staircase as it passes through the various storeys is especially curious. The dome that now surmounts the ninth storey was a substitution in 1839 for the old roof which was destroyed by

lightning. Being in the Mogul style, and not of the best type, its removal would, I think, be a great improvement, and it would be even better to substitute a flat unobtrusive covering in its place rather than attempt any imaginative restoration.

A number of chhujjas, cornices, pillars of projecting windows, parapets, &c., require renewal, and the ubiquitous weeds should be destroyed.

31. Near the tower and in a south-west direction is a large stone temple known as the Mokal-ji-ka-Mandir, dating from the 15th century. *It is choked up on all sides with vegetation, and its roof has been invaded and nearly destroyed by pipal roots which should be removed. Some loose stone walling abutting on the temple should be taken down and the whole structure set free.* What is now unobscured of the sculptures of the exterior shows some very fine and interesting friezes of figure subjects depicting real scenes in history. *The carvings require cleaning. The interior of the porch and temple should be thoroughly cleaned out, and some of the masonry in lintels, &c., requires strengthening.* The floor of the sanctuary is below the ground level, like that at Ambernath in Bombay. North and east of this fine old building are two interesting doorways—*that to the east is on the street of the Sindhi Bazar, and the houses which encroach on it right and left might with great advantage be removed.* My guide called both of these gateways "Ahar-ki-Darwaza." Close to this spot is the picturesque and historical fountain and tank known as the *gau-mukh*, and above is the *Mahasati*, where some of the early Ranas were cremated.

See photographs.

32. The foregoing are buildings that my guide Jive Ras, the kiladar, showed me the first day of my visit.

33. On the second day I began by examining the *Ram Pol gateway*, from whence Akbar is said to have carried off the wooden doors to the Agra Fort. I took an opportunity on my return *vid* Agra to look at these gates, and there can be no doubt that if they are the original ones from Chittore, Akbar had them covered with the present plates of copper ornament which is thoroughly Muhammadan and in the same style as the ornamentation in the Agra palace buildings. The *Ram Pol gateway* is a handsome masonry structure with bold friezes along the plinth. *Vegetation should be removed.*

See photograph.

34. The old *Jain Tower* (A.D. 896) of *Sri Allat* is in considerable disrepair and will require very careful treatment. *A tree is doing great damage in the uppermost storey, and there is much vegetation in the walls. One of the four projecting windows in the top storey has fallen away, and the niche with an erect Jain figure to the east will soon fall unless attended to. The carvings near the base want cleaning.* The *temple near the Jain Tower* has some handsome carvings inside and out *which are very neglected and dirty and deserve cleaning.*

See photograph.

See photograph.

35. The ancient temple to Mahadeo, *Nilkant* by name, is said to have been built by Bappa in the 8th century. It is kept in some repairs, and has a resident priest.

See photographs.

36. Close to this is the *Suraj Pol or Gate of the Sun*, a plain structure, and the eastern entrance to the fortress. A little further on the road, the temple of *Samiddheshwar Mahadeo* is passed; its sikra or tower is partly fallen, the enclosure covered with fragments of sculpture, and the porch or mandap has lost its dome. The sanctuary has that peculiar sunken chamber which I first observed in the temple of Ambernath in Bombay, and the plan of the temple is on the lines of an octagonal star. *Vegetation and trees are doing damage; sculptures require cleansing.*

37. Next comes an ancient looking building with two small domes, laid in the Hindu fashion of horizontal courses, called the "*Chattrang-mori-ka-Gumta.*"

38. The *Padmini-ka-Mahal* and its island palace are being repaired by the Maharana Sujjan Singh. The principal gateway is a handsome piece of architecture. *The niches and masonry basement facing the tank have unfortunately been whitewashed.*

See photographs.

39. The *Maha Kali Temple* has all the appearance of being ancient. Its sikra and domes covering the porches have been renewed in plaster. The exterior carvings are most interesting and curious. *They require cleaning.* The porch has a fine ceiling.

See photographs.

40. The *Patta Sing and Jaimal Palaces* are picturesque buildings with dark blue tiles showing in portions of the exterior. A short distance further on the Tower of Victory comes into view again, and the circuit of the fortress is complete.

41. The remedies here recommended are not very elaborate or difficult of execution. The structural repairs will require skill no doubt, but a very considerable improvement will be evident by simply clearing vegetation and cleaning up the buildings and their surroundings.

Note on works in progress, dated 19th September 1882.

The Dilwarra Temples are under two panchayats or committees, one at Sirohi, the other at Ahmadabad. The former can sanction annual repairs up to Rs. 2,000 and original or new works up to Rs. 15,000. The recent repairs are, however, clumsy and certainly inexpensive. I have authority to survey the various buildings.

2. At Ajmir a survey has been made of the Arhai-din-ka-Jhopra, of the Daolat Bagh, of the Khoja Syad's Tomb and surrounding buildings. There is now but one dome that is unrepaired in the Arhai-din-ka Jhopra. The enclosing quadrangle requires repair in places, and the carved fargments in the mosque proper should be cleaned.

3. An estimate for clearing one of the marble pavilions in the Daolat Bagh has been sanctioned, and the work has commenced under Mr. Brassington, Executive Engineer, Mayo College. The adjoining marble pavilion, now used as a station library, will also be cleared and repaired, and a grant of Rs. 2,000 has been contributed from Imperial funds. The hammam, occupied as the Commissioner's office, should be repaired as soon as possible.

4. The survey of the Khoja Syad's Tomb will show what remedies are essential to the preservation of the numerous buildings.

5. A restored drawing of the Taragarh gateway has just been completed, and I understand from Lieutenant-Colonel Steel, R.E., Secretary to the Agent to the Governor General, Rajputana, Public Works Department, that the funds for its reconstruction will be provided.

6. In regard to Ambar, near Jaipur, I have recorded my view in a memorandum of 18th August 1882, see page clxxiv, and I hope that His Highness the Maharaja will take the matter into his serious consideratior

7. I am not aware of anything having been done yet at Ulwar, not having been there since April 1881, but hope that the recommendation in regard to Fateh Jung's Tomb will at least be carried out.

8. My report on Udaipur and Chittore recommends a number of simple remedies which might easily be undertaken without delay, but for all structural repairs I recommend that an officer be appointed to draw out the specification of work, and to supervise it whilst in progress; but he should, in my opinion, have no responsibilities as to rates or the disbursement of money. Mr. Brassington, Executive Engineer of the Mayo College, Ajmir, could supervise the work at Chittore, and the engagement of his services would be the most convenient and inexpensive arrangement that I can think of. Chittore is 12 miles journey from Ajmir, where Mr. Brassington already has an office and establishment.

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Report on Monuments in the Punjab, together with a Note on works undertaken.

Note on Umritsar, dated 1st January 1881.

1. *The Darbar Sahib or Golden Temple.*—The temple or Har Mandar as it was at first called was built by Guru Arjan, the successor of Rám Dás; it occupied the site of the present building in the centre of the sacred tank, but was destroyed in 1761 after the battle of Ghulu Ghara near Ludhiana, and was rebuilt in 1762.

2. Maharaja Ranjit Singh, after seizing Umritsar in 1802, spent considerable sums of money on it, and from this time the temple has acquired the name of Darbar Sahib. The building is a remarkable specimen of modern Indian architecture. Its features and details are partly Hindu and partly Muhammadan in origin; but, as Mr. James Fergusson observes, neither its outline nor its details can be commended. The general effect produced by its marbles, walls of mosaic, and domes and upper storey overlaid with gold is, however, very rich and splendid, and its situation in the midst of the beautiful lake, surrounded on all four sides by picturesque pavilions or "bungas" as they are called, shows off the building to full advantage.

3. Umritsar is the Holy City of the Sikhs, and the Golden Temple and its surroundings are held in the highest reverence. A Committee of Sikhs presides over the welfare of the buildings, and repairs are now being sedulously executed, both inside and outside the temple. The painted and gilt interior decorations are being renewed, where faded or damaged, in a masterly way. This shows that native artists, left to themselves, are as thoroughly capable of emulating the splendid ornamentation brought into India by the Moslems as they were in the days of Akbar and Shahjehan.

4. As regards the preservation of the temple and the outlying Sikh buildings, I would recommend a greater attention to cleanliness. In spite of the sanctity which compels every visitor—Native or European—to remove his shoes, there are corners in the enclosure where the stenches are sickening. I also noticed the greater part of the inlaid and carved woodwork in the Darshami Darwaza, in the carved doors in the temple, and in the Baba Atal to be suffering from dirt and neglect. A little soap and water and occasional oiling would go far to preserve this woodwork, which is very beautiful of its kind.

5. The Baba Atal is a lofty tower built over the tomb of Baba Atal in A.D. 1628, and is one of the buildings held in reverence round the Golden Temple. Beyond its size and pleasing proportions, there is nothing very remarkable in the exterior; but the interior decorations of gold and colored arabesques are effective and handsome. These latter are also being renewed by the Sikh Committee.

6. In accordance with the wishes of Sir Robert Egerton, the Lieutenant-Governor of the Punjab, expressed to me at Lahore in November last, I have caused drawings to be put in hand of the Golden Temple and the neighbouring tower of Baba Atal.

7. Besides general plans, sections and elevations, details are being made of doorways—inlaid work in marble and wood—of wooden carvings, and of the gilt and painted interior embellishments.

8. These when complete will furnish some interesting material for the study of modern Indian decorative art.

9. *Ram Bagh.*—To the north of the city is the Ram Bagh, which was enclosed as a garden by Ranjit Singh about 1820, and in which he erected buildings for the accommodation of himself and his court whenever he stayed at Umritsar. These buildings were, until quite recently, used for the district courts and treasury, but another more convenient site has been found on which the kutcherry is newly built, and the Ram Bagh is well cared for as a garden and the buildings kept up as objects of interest only.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 23rd August 1881.

I have the honour to enclose a copy of my report of the 10th May 1881 (see page XIX) containing certain recommendations for preserving national buildings of interest at Lahore and Delhi, and to solicit that I may be informed whether His Honour the Lieutenant-Governor wishes to undertake any of the works specified before the close of the current financial year.

2. The plans to show the present condition of the buildings, and what may, with advantage, be done, are in course of being faired out in my office, and it will be necessary to appoint an officer to frame the estimates.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 23rd August 1881.

I have the honour to report that I have consulted with Major-General Cunningham, Director General of the Archæological Survey, as to the best way of dealing with the Buddhist ruins in the Peshawar Division; and beg to submit the following recommendations, in which General Cunningham fully concurs.

2. It is well known how interesting and valuable are these remains, both from an archæological and artistic point of view. On the one hand, General Cunningham is anxious to continue an examination of the Peshawar Valley, which has already yielded so much valuable historical and archæological information and matter; and on the other hand, I would urge the importance of preserving to posterity what remains of the art and architecture of the Gandhara Monasteries.

3. Already many valuable and beautiful sculptures have been exhumed from the Takht-i-Bahi, Shahbaz Garhi, Sahri Bahlol, Jamal Garhi,* and elsewhere, and those that are now exhibited at the Calcutta and Lahore Museums are of the highest interest and value.

4. A good deal more may be discovered and be applied in the elucidation of Indian archæology and art. Many of the places already examined may be expected to yield further discoveries; and the village of Nogram or Ranigat is a very promising site.

5. How far the remains that may be brought to light can be preserved *in situ* is I think, to be only determined by consulting with the local authorities, and by taking each case on its own merits.

6. In some places the fanaticism of the Muhammadans is a source of danger to the figure sculptures, which they mutilate the instant they are dug out of the sandy mounds and earthed up ruined buildings. In such cases I think the only way to preserve after excavation is to remove the sculptures to a place where they can be guarded.

7. In other cases it may be possible to arrange for custody.

8. Very few of the remains appear above ground, and the first step is to secure the services of a company of Sappers and Miners under the command of an officer with a taste and appreciation for archæology. The next step is to examine carefully the most promising localities and to excavate.

9. I would recommend the examination of the Takht-i-Bahi, Shahbaz Garhi, Jamal Garhi, Shah Deri, and Takal Bala (near Peshawar), and that the sculptures which may be laid bare and rescued from sand and earth, be collected at Naoshera and from thence distributed to the various Indian Museums and Schools of Art.

10. At the same time I am strongly of the opinion that any buildings or ancient remains should, if possible, be preserved *in situ*.

11. If these recommendations meet with the favourable consideration of His Honour the Lieutenant-Governor, I hope that the services of a company of Sappers and Miners may be secured for a short time this ensuing cold season to carry out excavations and examination of remains in accordance with what General Cunningham and I, in consultation with the local authorities, may recommend.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 28th September 1881.

In reply to your letter No. 139 of the 19th instant, I have the honour to recommend that repairs to the following buildings be commenced:—

Jahangir's Tomb at Lahore.

Shahlimár Gardens at Lahore.

The Kutub buildings and grounds, Delhi.

The ground Humayon's Tomb, Delhi.

2. The plans for these will be submitted in a few days. In the meanwhile I beg to strongly recommend that an application be made to the Lieutenant-Governor of the North-Western Provinces for permission to ask Mr. Heath to visit the buildings mentioned and to draw up the estimates.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Inspector General of Military Works, dated Simla, 3rd October 1881.

Referring to the letter No. 294B., dated the 8th instant, addressed to you by the Government of India, Public Works Department (a copy of which was forwarded to me for information), I have the honour to solicit your consideration of the various recommendations, referring to buildings in the Lahore and Delhi Forts, contained in my report * dated 10th May 1880 (see page xix.).

* Copy enclosed.

2. I respectfully beg to recommend that the works be put in hand as soon as possible. The plans and drawings alluded to in the report will in a few days be ready to be submitted to you. In the meanwhile I would suggest your applying to the Government of India for a grant of Rs. 10,000 for the Delhi Fort buildings, and of Rs. 5,000 for the Lahore Fort buildings.

3. Mr. Heath, Executive Engineer of the Archæological Division, North-Western Provinces, will probably be employed at Lahore and Delhi by the Punjab Government in the repair of buildings; and I strongly recommend that advantage be taken of his experience to execute the works in the Forts at those places.

4. I have suggested to the Punjab Government the propriety of procuring Mr. Heath's services, and recommended his deputation to Simla for the purpose of framing estimates from the plans in my office.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Inspector General of Military Works, dated 1st February 1882.

Referring to my letter No. 448 of 3rd October 1881, I have the honour to suggest the following preliminary measures:—

2. *Lahore Fort—Diwan-i-am.*—The provision of other barrack accommodation may take some time to arrange, but I strongly recommend that the painted apartments in rear of the throne be evacuated and all colour or whitewashing prohibited.

Khwab-gah.—To be cleared of its church fittings.

Jahangir's buildings.—Used as a Roman Catholic chapel and staff quarters; to be evacuated, and the sculptured columns freed of the whitewash and enclosing walls.

Delhi Fort—Diwan-i-am.—I recommend the removal of the canteen. A drawing showing the originl mosaic behind the throne is in hand, and will be submitted.

3. *Diwan-i-khas.*—The roof to be strengthened from the top by the insertion of iron joists. The present painted wood ceiling to be rendered secure, and renewed where the wooden panels and mouldings have been removed. An estimate for repainting the coloured ceiling at the rate of Rs. 1-8 per square foot by Ismail Khan, miniature painter, Chandni Chauk, Delhi, seems to me worthy of consideration; but it would, I think, be prudent to have a sample painted at one corner for approval, which would also serve as a muster for the rest of the work. Only the centre ceiling requires repainting.

Sawan and Bhadon.—These pavilions are used for serving out rations and for a gymnasium, and should, I submit, be cleared and cleaned.

4. The following plans and drawings are forwarded by post; but I hope that they wlll be returned as soon as done with, as they are required for purposes of illustration:—

(1) Plan of Delhi Fort (buildings of interest coloured red).
(2) Pavilion called Sawan in the Delhi Fort (Bhadon is a similar pavilion).
(3) Painted ceiling in the Diwan-i-khas—Delhi Fort.
(4) Plan of Lahore Fort (buildings of interest coloured).
(5) Diwan-i-am in the Lahore Fort, as it is.
(6) Diwan-i-am in the Lahore Fort, as it was.
(7) Khwab-gah in the Lahore Fort.

5. Some notes on the condition of buildings of historical and artistic interest at Lahore and Delhi are enclosed.

Lahore Fort.

Diwan-i-am.—The original railing which was in front of the building has all been removed, with the exception of a few uprights. The steps, too, have all disappeared.

Of the building itself, the open pavilion has been enclosed with walls on the west and east and by a verandah on the south, and whitewashed.

There is a cornice running round the building, which has evidently taken the place of the original chujja. The present parapet wall, too, is evidently new.

Rooms at back.—Lower floor only passages. Upper floor rooms used for meals. All the walls whitewashed.

Outer verandah and room F.

The ceiling has not been interfered with, but the centre flower has been removed in nearly every case.

The plaster ceiling has been taken down in the rooms marked A A, and the vaulted masonry exposed, showing large cracks. Flooring in good order.

Open pavilions.

A brick parapet wall has been put up between the columns on the north side in place of the original railing. Flooring in fair order.

The ceiling over the inner room (B) is being disintegrated through damp getting to it, as also some of the coving, measuring 21 feet; and another portion 5 feet long. There are two cracks across the room at the back, and a single crack from end to end in the open pavilion.

Room C.

The marble dado in fair order, except portions missing measuring 3′ × 3′ 9″ and 10′ 9″ × 9″. The ceiling is destroyed with the exception of a few pieces. The centre ornament completely gone, but no cracks perceptible.

Rooms D and E

The marble dado nearly all gone; only a few slabs remain. The ceiling cracked in several places, and looks unsafe. The marble columns are very dirty in the throne and galleries. The perforated stone railing between the columns has been removed where marked with the letter *a* in plan.

The small kiosk on the roof has been blocked up on all sides and door let in on one side.

The whole has been whitewashed.

Khwab-gah.—Outside pavement worn and damaged.

The exterior of the building is in good preservation and intact, but a thickness of 6 inches has been added to the parapet wall.

Inside the open archways have been filled in with wooden door frames. Flooring in tolerably good condition, but a good deal worn, particularly the grey stone.

Recesses—No. 1, plain slabs; No. 2, inlaid with mathematical figures, damaged in places; No. 3, in fair order, but a few stones removed from the paving. The baptismal font is placed here. No. 4, same as No. 2. No 5, only plaster flooring now.

The perforated screen work in these recesses is in good order.

The old roof has been removed.

Small pavilion outside the Shish Mahal.—The outside is in good order.

The red sandstone paving of the outer platform is scaling off.

The flooring inside is of plaster, except at the north end, measuring 14′ 8″ × 4′ 8″. In the centre of this was a cistern 5′ × 4′ 3″ (now filled up), and the side portion of marble with a border of inlaid work.

The wall on the west side has a marble dado 3′ 9″ high, gilded and painted. Above this dado the wall was painted, but now in a damaged condition.

The ceiling has sunk in the middle about 6". A portion at the north end is of sheet copper 13' × 3', the centre portion of which is plain; but the border is a raised flowered pattern.

Shish Mahal.—The flooring of the open courtyard facing the Shish Mahal is worn and broken, as also that of the fountain.

There is a low parapet wall of brick masonry round the fountain, which seems to have been lately put up.

Armoury.—Flooring of open verandah at south-east corner broken up.

The long room in use as a store for keeping old Sikh weapons. The doorways have glazed frames.

Naulakha Burj.—The plinth is in good order, except where marked. The steps are bad, and seem to have been put up recently.

Exterior.

The lower panels are in good order, plain marble. The panels marked A and B are in a ruined condition, only a few stones of the inlaid work remain. The stone-work has been removed altogether from the two panels C and D on the opposite side of the doorway. The border between these panels is in fair order, but many stones removed from it. Above the soffit line of the door is all plain plaster work.

South end.

(Front).—Only a few stones remain of the inlaid work in the panel marked E. Panel F taken out bodily and plaster substituted. In the panels G and H only a few stones remain. The panels above and below these are of plain white marble, and are in fair order.

East side.

The stone beam spanning the entrance has cracked in two. There are other cracks, as shown on the drawing; the border between the panels is in good order.

In the panels corresponding to A, B, C and D only a few stones remain of the inlaid work. The panels above and below are plain. The border is in order. The chujja and brackets on the south end are of wood; as also a portion at the north-west corner.

North end.

The south-east corner seems to have been recently rebuilt. Flooring of lime mortar; is in fair order.

Inside.

All the flowers in the inlaid work of the dado have been removed. About half of the mosaic border has been removed, and putty and paint substituted; the remainder is in fair order. The painted work in the panels above this is in fair order. The portion above the doorways is in good preservation.

The ceiling is cracked in several places.

Of the inlaid work on the marble columns, very few stones are left on the bases; but the work on the capitals is in fair preservation.

Two open pavilions on either side of the Naulakha Burj.—Flooring broken up. Beam across opening at north end cracked in three places; a pipal tree has taken root at the back of the wall, as shewn on the elevation.

Pavilion on the south side.

The whole in fair order.

Pavilion on the north side of the Naulakha Burj.

The inlaid work on the bases of the marble columns has been damaged

and most of the stones removed, otherwise the rooms in the lower floor are in good order. But the rooms on the upper floor are in disrepair and dirty.

Shish Mahal.

Moti Masjid.—Flooring in fair order, but a *pipal* tree has taken root at *a* (marked on ground floor plan), and upheaved the slabs round it. The flooring has also bulged out in two places marked + +), evidently caused by the roots of the same tree. The black marble inlaid work on the outside walls is damaged in several places.

Open courtyard.

On the south dome is a *pipal* tree (*b*) on plan shown in elevation, which is causing the slabs to be lifted up from their beds. The same is being done by the roots of a tree (*c*) which has taken root in the middle dome. There are a few more small trees on the roof, and one of good size at (*d*).

The inside is in fair order and kept in repair. The open archways outside have been built up and doors and windows let in. The entrance lobby is in a neglected state; the plaster has fallen off and the flooring is in a bad state.

A *pipal* tree is growing up against the entrance steps.

Shahlimar Gardens near Lahore.

The alcove at south-west corner.—Inside plastering all gone, as also from top of cupola. This wall is in a ruined condition. The portion immediately adjoining the pavilion leans over, to a distance of 373′ on the south and 200′ on the north side. The brick-on-edge terrace is in a very bad condition, especially 170′ of it to the south. The small wicket (76 feet from south-west corner) has been blocked up, the arch having fallen in; a similar wicket has been blocked up on the other side of the pavilion used by natives. The terrace on the north side of this pavilion is in fair order.

West wall.

The alcove beyond this pavilion is in a very bad condition. The chujja work has fallen away; the plaster on the ceiling is falling off.

The wall beyond this alcove is bent in the shape of an S for a distance of 238 feet.

The terrace along this portion has sunk and is in a very bad condition. The remainder of the wall on this side is vertical, though shaky; the plastering has peeled off.

The terrace beyond this up to the gateway D is in fair condition, but sunk in places.

There is a good deal of vegetation springing up on the wall near the gateway.

The tilework in the spandrils of the large archway on the inside has been removed. Four panels are in fair condition Of the remaining fifteen, the tilework has been totally removed from eleven and the other four are in a very bad state. In the soffit, ten patterns are gone, the remainder are in fair order.

Gateway D with tilework.

The south pinnacle on this gate leans to one side.

The terrace beyond has sunk very low in consequence of water having lodged.

The alcove at the north-west corner is in a ruined state, the chujja work has been removed; the old ceiling on the lower rooms was removed and been replaced with one of reeds; the roof rests on rough 'bullies' (saplings).

North wall.

In fair condition, but the plaster gone 4 feet from the ground; the upper portion is falling. The pavement has sunk and been destroyed all along this wall.

The pavilion on this side has been repaired lately in a rough way. The roof rests on beams and burgahs. The old staircases on either side, leading to the terrace on the roof, are in a ruinous condition.

There are traces of a staircase in the floor of this pavilion which led to the garden on the north side of the present one. This staircase and passage have been blocked up.

The alcove at the north-east corner is in fair condition.

East wall.

Portion between north-east corner and gateway E in a bad condition; plaster falling. The gateway E is in a ruined state. Of the tilework in the front elevation only 7½ panels remain.

The spandrils are destroyed; tilework gone. On the inside the tilework is destroyed to a height of 3 feet on the north, and 6 feet on the south. Also at the crown portions are gone. A portion of the wall between this gate and the hammam has been repaired. The remaining portion (246 feet) is in a bad condition. The high wall leans over for a distance of 110 feet from its end. The portion adjoining the hammam is vertical, but the plastering has gone.

The dome over the alcove at this point shows a large crack. The chujja work is destroyed.

The columns of the balcony have all split above the springing line, and the whole weight of the balcony now rests on a wall recently built up. The original cantilevers evidently gave way.

The gateway near this alcove is in a dangerous condition. It does not seem to be in use now as a thoroughfare.

The wall beyond to the south-east corner is in a bad condition. The paving too is bad.

South wall.

Has lost much of its plaster.

The Hammam.

The entrance steps broken in parts. Entrance corridor is in fair order; plaster bad. The two outer doors are rough and seem to have been put up recently; flooring of all the rooms is broken up in places; plastering in fair order, but the whole dirty.

Wall running east and west, between the two alcoves Q and R, in disrepair. The cornice broken in several places.

The paving along this wall is worn out. The stone facing is all scaling off.

A portion of the railing (15 feet) on the west side of the pavilion, together with the upper wall, have been upheaved on account of the vegetation taking root.

The brick terrace on the west side of the centre pavilion has sunk on account of water lodging.

The terrace along the channel has sunk in several places. A portion of the flower beds round the large tree (a) has been upheaved.

The original railing on the upper terrace seems to have been removed.

Pavilion I. In good order, but the marble dado has been removed in many places.

The brick-on-edge terrace along the channel has sunk in several places.

South entrance. In fair order. The marble dado has been removed in several places. All the pavilions round the large tank, as also the one at the south entrance, have been repaired and whitewashed.

Shahdara near Lahore.

Jahangir's Tomb.—The paving on the platform on which the tomb rests is in a very bad condition. The red sandstone facing of the plinth has been removed. A portion of the paving measuring 1′ × 38′ × 10′ on the south has been removed.

Platform.

There is a good deal of vegetation springing up on the walls and minarets of the tomb itself. A small pipal has taken root on the soffit of an arch on the south-eastern corner.

Outer arcade of the tomb. Flooring in tolerable order. Broken in places colored sepia on ground plan, measuring—

1′	×	20′	×	10″	in south verandah.
1′	×	13′ 6″	×	7′	
1′	×	6′	×	10′	in east verandah.
1′	×	6′	×	6′	

The nosing of the plinth is chipped and broken.

Inner rooms of the tomb opening on to the verandah. Flooring of all in a bad condition.

Plaster in fair condition, whitewashed. There is a large crack in the vaulted ceiling (shown in plan).

The stone bressumers across the door-ways have all cracked in two.

Only two of the old doors remain. But a number of new ones have been recently put in.

I.—Leading from the west side. Flooring in good order. Tilework in fair order, but dirty. A portion removed and replaced with plaster, measuring—

Corridors leading to the central apartment.

1′ × 5′ × 2′

Upper portion of walls coloredwashed a dirty brown.

The ceilings are cracked from end to end. Arches in the same state.

The entrance door in a dilapidated state

II —Leading in from south side

Flooring — Removed as shown in plan and measuring—

1′	×	15′	×	11′
1′	×	25′	×	3′
1′	×	17′	×	4′

Tilework in fair order, damaged in places, measuring—

11′	×	3′ 6″	×	9″
2′	×	1′	×	1′
1′	×	2′ 6″	×	3′
1′	×	4	×	1′

Fresco-work — Patched in several places, measuring—

1	×	4	×	4
1′	×	11′	×	3′
1	×	8′	×	9
1′	×	10	×	11′
1′	×	10′	×	3′

A patch of ceiling is damaged measuring—

1′	×	11′	×	11′

III.—Leading in from eastside Flooring in good order, except portions measuring—

1′	×	9′	×	4′
1′	×	5′ 6″	×	2′ 6″
1	×	2′ 6″	×	1′ 6″

Tilework in fair order, but damaged in places, measuring—

1′	×	1′	×	1′
1′	×	2′	×	1
1′	×	1′ 6″	×	9″

Fresco — Damaged in places, *i e*, coving, measuring—

1′	×	30	×	2′

Ceiling, measuring—

1′	×	20′	×	10′
1′	×	11′	×	11′
1′	×	10′	×	3′

IV.—Leading from north side.

Flooring damaged, measuring—

2′	×	5′	×	2′
1′	×	6′	×	3′ 6″
1′	×	3′	×	2′
1′	×	5′ 6″	×	2′

Tilework in fair order, except a peace measuring—

1′	×	3′	×	2′

Fresco in very damaged condition.

Ceiling cracked from end to end.

The centre room (in which stands the sarcophagus) is in good preservation, but the canopy of cloth under the skylight is very dirty and old.

Parapet wall of terrace covering the whole building has been recently built in place of the railing which was removed. The same remark applies to the parapet walls round the four minarets. Three steps broken in one minaret (south-eastern); flooring of terrace patched in several places.

The ceiling of the domes over the minarets is all gone.

Garden wall.

The base of the wall for a height of about 4 feet is in a ruined condition The plaster has fallen off, and saltpetre is causing the bricks to crumble away. There are the remains of boulderpaved walks all round.

West wall.

This wall is completely undermined for a distance of 400 feet from the north-western corner. The alcove is also undermined through the bricks crumbling away. The plastering of the ceiling is falling off; the steps are broken.

North wall.

Undermined to a height of 4′ from base, to the centre building 703′ from the corner. This building had been converted into a dwelling-house for railway employés. The interior is in fair order, but the outside walls are in a bad condition.

The alcove at the north-east corner is crumbling away. The dome is in disrepair.

East wall.

Both sides of the wall crumbling at base, 4′ from ground, to a distance of 310′ from north-east corner. The remainder of the wall, together with the baradari on this side, have been destroyed by the encroachment of the river Ravi.

South wall.

About 550′ destroyed from south-eastern corner.

The building in the centre of this wall is in good condition. It was converted into a dwelling; the outside of the wall is crumbling away.

West wall.

Good condition for 100′ from south-west corner. At this point there is a large crack, showing where the wall has sunk; beyond this the lower portion is crumbling.

Four of the cisterns (B), (D), (G) and (E) are in fair order, the others in ruins.

[*N.B.*—The garden is only kept up round the tomb. The other beds are let out for cultivation.]

Old Serai, Shahdara.

South entrance.

Completely ruined. A few rooms above are habitable; the lower portion crumbling away. The out-offices in the whole enclosure are in a ruined state, and falling in several places.

Building (formerly a masjid) on west side.

Front face stones are loose and falling. The plaster lining of the large archway completely fallen in. Inside had been repaired and made habitable.

North entrance.

In a dilapidated state; a few rooms made habitable in the upper floor.

East entrance.

Front in fair order, but many panels are falling and others have fallen. Rooms in the lower and upper floors have been repaired and used for offices.

Tomb of Asaf Khan at Shahdara.

The side buildings in this enclosure have been repaired and made habitable. The enclosure walls are in much the same state as those round the garden in Jahangir's Tomb.

The tomb itself is in a very dilapidated state. The outer shell of slabs has been completely removed, as also the slabs from the flooring; only a few left in the plinth. The tombstone is in a ruined and neglected condition.

Some of the tilework still exists in the arched doorways.

Chauburji, Lahore.

Floor.

Broken up and destroyed. The north-west minaret and corner fallen and destroyed. The plaster from inside has fallen away. The plaster in the side recesses of the east elevation (facing road) all gone, same for spandrels in the main archways. The portions marked with the letter A show where the tilework has fallen off. The north-east minaret is in fair order, but the brickwork is exposed where marked B.

North elevation.

The tilework on this side has been damaged by exposure to the weather, the colored surface of the tiles having scaled off.

West elevation.

Outer surface in fair order, but the inside shows cracks and looks unsafe.

South elevation.

Tilework destroyed as marked in drawing. The wall on this side shows a large crack, and the minaret at the south-west corner seems to be sinking. There was a bush growing out of the wall near the south-east minaret.

Mosque of Wazir Khan, Lahore.

The flooring in the open courtyard is in tolerably good condition, except where marked A A in plan. The perforated brickwork round the cistern is worn. The flooring inside the mosque is in fair order. The plaster inside has fallen away to a height of about two feet, with portions remaining in a few places. The cornice below the springing line is nearly all gone. The arches over the entrances have all cracked at the crown. The domes seem to be sound, except at the south-east corner. At this point there is a large crack, evidently caused through the foundations sinking at the corner. The tilework on the walls outside is in fair order, except parts defaced as shown in drawings. That on the domes of the minarets is nearly all destroyed. The pinnacles which were on those domes have fallen down or been removed. The railing of perforated brickwork on the minarets is in an unsafe condition.

The small tomb in the open courtyard is in a neglected state. The tilework on the courtyard walls is in fair order, except about 20 feet of the work on the parapet wall on the north side, which has been defaced, also the tiles from an archway and spandrels on the south wall, removed bodily. The plaster with imitation painting is in disrepair.

Entrance gateway on the east side. The plaster from the plinth has fallen off to a height of about 3 feet. The portion above this in fair order, but dirty. The corridors on either side are in a ruined condition.

Gate of Gulabi Bagh.—South face towards road; plaster of plinth gone. The tilework in good order, except where shown as destroyed in the drawings. The plaster of the entrance archway has been recently renewed. The plaster of the centre room has fallen away. The fresco work in this gate has been destroyed in places by the plaster falling off, and has been blackened by smoke in others. The arches have all cracked at the crown. The back of the gateway has been blocked up with a brick wall.

The fresco paintings have been destroyed to a height of about 4 feet; above this the work is in fair order, but dirty. The four pinnacles which stood at the corners over the parapet wall have fallen.

West face.—Most of the plaster fallen away, and nearly all the tilework, with the exception of two patches measuring 9′ × 1′ and 4′ × 1′.

East face.—Same as west face.

Back or inner face.—The plaster and tilework all gone.

Mosque of Begampur.

The front of this building is in fair condition, but damaged in parts as shown on the elevation. The interior is in a very neglected state. The flooring no longer exists.

The dado was originally of tilework; the walls above this were painted. Very little now remains of the tilework; the walls have been whitewashed. All arches show cracks at the crown. The plaster of the ceiling has fallen off.

Delhi Fort.

Dewan-i-Khas.

Flooring in good order. The original flooring stones seem to have been replaced by inferior ones.

Mosaic work.

The following tabular statement shows the present condition :—

[*N.B.*—The letters and figures refer to corresponding marks in detail drawings showing where the number of stones have been reproduced, with a composition of cement.]

Letters and figures—*vide* plate.		No. 1 or North row of pillars.		No. 2. Row.		No. 3. Row.		No. 4. Row.		No. 5. Row.		No. 6 or South Row.	
		Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.
A	Marked on detail drawing of panels of mosaic.	1	3	2	16	3	11	3	11	3	15	3	1
B		2	2	2	16	0	0	1	13	2	16	4	0
C		3	1	4	14	0	14	3	11	2	16	4	0
D		1	3	0	16	0	14	2	12	1	17	0	4
E		1	3	0	18	1	13	3	11	1	16	1	8
F		1	3	0	18	0	14	2	12	2	16	3	1
G		3	1	1	17	1	13	1	13	0	18	2	2
H		0	2	0	16	0	13	1	11	0	18	0	3
J		0	4	0	17	0	11	0	12	0	17	0	4
1 to 11		0	0	0	65	0	54	0	66	0	78	0	44
12		0	4	0	18	0	14	0	13	0	18	0	4
13		0	4	0	18	0	10	2	11	0	17	1	3
14		0	4	1	17	0	8	3	10	0	17	1	8
15		0	4	0	18	0	14	0	14	0	18	0	4
16		0	4	1	17	0	11	1	11	0	17	0	4
17		2	·1	1	17	0	10	1	11	0	17	1	3
Border round panel.	Flowers	20	447	16	500	17	403	49	390	22	461	20	466
	Leaves	3	401	10	603	5	358	10	407	21	561	11	342
Panel facing inwards in the shorter sides of the building.	Flowers.	21	139	...	...	...	...	...	...	...	...	24	136
	Leaves	17	25	...	...	...	...	...	...	...	...	2	20

Of the narrow panels two are intact. The remainder have all the stones removed.

Gold leaf work. In tolerable preservation.

Ceiling. Centre hall. The ceiling on the south side has sunk below the cornice to a depth of about 4 inches. The original painted work is covered. What now remains was done recently and is incorrect. The ceiling of the outer colonnade is in better condition. The painted work in this is what was originally done. It has been damaged in several places through the leaking of the roof. The spandrel of the centre archway on the south side shows a number of cracks.

Mosaic work in dado. *Hammam.—Rooms lettered in plan*—All the stones from the flowers wanting, as also from the buds; the leaves and stalks intact.

Walls (above the dado) and ceilings whitewashed in all the rooms.

Room A. Flooring in pretty fair order, except where some of the flags have been removed.

Room B. Same as above. Corridor between B and C in good condition.

Room C. Flooring in good preservation. Inlaid work in floor, a few flowers remain intact; others all gone, but the stalks and leaves intact.

Room D. Same remarks as C. The slabs round the fountain are loose in their beds

Corridor between D and G Flooring in fair order, walls whitewashed. The red sandstone flags in the ceiling are scaling off.

Room E Flooring repaired, walls and ceilings whitewashed.

Room F. Flooring in fair order, as also cistern.

Room G. Same as F. The cistern in this room is in a ruined condition. All the stones from inlaid work have been removed, only two or three remain.

Room H. Flooring in fair order. Cistern in much the same condition as the one in the room G.

[*N.B.*—The three cisterns in the above rooms (F, G and H) are said to have been brought from the gardens of the Fort. These were in use as purely sitting rooms.]

Moti Masjid.—The flooring in the open courtyard is in fair order; but the slabs from the fountain bed have been removed.

Flooring inside the mosque in good order. Some stones from the inlaid work removed. A new panel (the top one) of the entrance door has been recently put in. The outer walls round this mosque are said to have been built after the mutiny.

Samman Burj.—Flooring.—North verandah. Portions on either side of the channel in a very bad condition. East corner room is sunk in several places. The flooring flags are all worn and scaling away.

Walls and ceilings.—North verandah plaster in disrepair. One of the stone flags in the ceiling (the centre one) is cracked and unsafe.

Room at north-east corner. Ceiling shows a crack along the middle.

Room under dome. Mosaic work. The stones from all the flowers removed, only leaves and stalks remain intact. Small bay-window on east side. Painting in the ceiling obliterated. The railing between the columns gone.

The other rooms in this building in fair order, except the mosaic work of which the flowers have been removed; the stalks, buds, and leaves are nearly, all intact.

Dewan-i-am.—Flooring flags worn and scaling away. There are marks of a stone railing which existed between the outer columns. The steps on the west side are worn and chipped. The flags on the face of the east wall are scaling off, as also the stone pilasters along this wall. A portion of the coving has been broken.

The detailed drawing of the Peacock Throne mosaic work shows where stones are missing.

Nakkar Khana.—This building is in good condition, as it is constantly repaired, except the two recesses on the east face, which are both in a dangerous condition. The joints between the slabs lining the arched roof have opened and the whole threatens to fall in. The elevation shows where slabs are split and broken.

" Sawan " and " Bhadon."—Flooring in fair order. The wall and ceiling whitewashed. All the stones in the mosaic work on this wall have been taken out. A store had been formed on the south side as shown in plan by building up mud walls between the columns. This room was in use as a godown for the Commissariat contractor. A portion of the cornice has been damaged on the east side; also one of the columns (marked on elevation) shows where a round shot struck it.

The pavilion on the opposite side similar to the above, called " Bhadon," is in use as a gymnasium. The flagged flooring has been taken up and plaster flooring substituted. The wall at the back has been whitewashed, as also the ceiling. The stones from the mosaic work have all been removed.

Zinat-ul-Masjid, Delhi.

The flooring of the open courtyard is all worn and overgrown with grass and jungle. The flooring inside the mosque is in good order. The plaster has fallen in places. The recesses in the west wall have been opened out, and open brickworks put in for ventilation. A lean-to has been put up on the outside to protect this wall. The domes are overgrown with *nim* and *pipal* trees.

The buildings adjoining the mosque and intended for travellers are in a ruined state.

Kalan Masjid, Delhi.

Flooring broken up and worn, except in centre court. The plaster has fallen from the walls and ceiling. A portion of walling has fallen on the north-east side measuring 10′ × 10′ × 2′. All the roofs are in a very unsafe condition, and leak very much during the rains, through the outside plaster having been destroyed. The dome and vaulted roofs show large cracks. The whole roof is overgrown with vegetation.

Fatehpuri Masjid, Delhi.

Flooring is all worn and broken up, but undergoing repairs. Intermediate supports have been put up (as shown in plan) to support the roof which threatened to come down. The chujja work has been shortened and only a coving remains. The present kiosks over the minarets were put up recently in place of the original ones. There are a number of pipal trees over the dome, which is now plastered and whitewashed. It is said to have been originally covered with blue tilework.

Purana Kila (Old Fort), near Delhi.

Outer courtyard overgrown with grass and jungle. Floors all broken up.

West wall.—Niches lettered on plan.

A.—In fair order, but very dirty. The ceiling shows a crack in the north-west corner.

B.—Damaged in places; otherwise in fair order, but requires cleaning up.

C.—Centre. The fringe of carved flowers along the arch broken away in parts as shown in drawing; otherwise in fair order.

D.—A good deal of the inlaid work damaged, particularly two patches measuring 1′ × 6′ × 3′ and 1′ × 5′ × 3′.

E.—In good order, and seems to be in use for worship. There is a crack here similar to the one in A.

End walls, north and south.—The middle arch in these walls show cracks; otherwise they are all right.

The cross arch between C and D shows a gaping crack as marked in cross-section.

Front wall.—Archways on the south of the centre opening cracked at crown; the others seem to be sound. The parapet wall over this wall repaired about 9 years ago. The bases of the pillars at the south end seem to be crushing. The inlaid work in front is a good deal damaged. All the ceilings show large cracks and look unsafe.

Roof.—The gallery along the back portion shows a crack in the vaulted roof from end to end. The roof is all overgrown with grass and jungle.

Humayun's Tomb (near Delhi).

Fair order, but the recesses very dirty. The minarets which existed on the east side have fallen. A portion of the wall adjoining (on the north side) has fallen down, as marked (*a*) in plan. Remainder of the wall up to the north-west corner in tolerable preservation inside, but the back of the wall crumbling away. The bastion at this corner in ruins.

West gate

In pretty fair order. The building A in the centre of this wall is dirty and in disrepair. The building B at the north-east corner is in ruins.

North wall.

East wall.

The whole of this wall as well as the building C is in a ruined state.

South wall.

Fallen, as shown in plan, to within 160 feet of the south gateway; remainder in tolerable order. A portion was removed, as shown dotted in plan. The south gateway has been repaired and converted into a rest-house for the police officers.

There are the remains of a small mosque as shown at (*d*). The bastion at the south-west corner is in a ruined state. The wall between this corner and the gateway has fallen as shown at (*b*) and (*c*).

Of the original walls and cisterns very little now remains. The garden, too, is overgrown with vegetation. Only the portion between the west gateway and the tomb is kept up; the other portion is all farmed out for cultivation. There is an old tomb in the south-east corner as shown in the plan. This tomb as well as the one outside the enclosure have some fine specimens of incised work in the ceiling, but both are in a very neglected state and falling to ruins. The tomb of Humayun itself is in fair preservation, but a number of small pipal trees have taken root on the top terrace and dome. The minarets from most of the corner pavilions have fallen. A portion of the chujja work, about 6 feet, has fallen from one of these pavilions (north side). The perforated screen work in the windows is damaged in a few places.

The railing on the terrace has fallen or been removed in several places, measuring—

South side 1 × 30 feet.

East side 1 × 350 „

North side 1 × 40 „

The walls in the basement show extensive cracks from end to end on all four sides, evidently caused by the outer walls sinking.

Kutub (near Delhi).

The Jamali Kamali Tomb.—The paving outside is worn and broken up in parts.

Outside.

The whole of the enclosure is overgrown with jungle. The plaster from the outside walls has nearly all fallen, and very little of the tilework remains; portion of tilework exists over the south entrance, but is covered with mud. The chujja work looks unsafe and liable to come down; a length of 18″ of it has fallen. A small *nim* tree has taken root over the north parapet wall.

The tilework in the dado is destroyed in parts, measuring about 52′ × 3′.

Inside.

The plaster above the dado nearly all gone.

Border round recesses 37′ destroyed; that along the top of wall 18′ destroyed. The incised work in the ceiling is in good preservation, but dirty. The patterns have been covered by visitors with red ochre for the purpose of obtaining impressions on paper.

Tomb of Fazalulla Khan. Flooring all broken up and destroyed.—A in fair

Recesses.

order, but dirty; a good portion of the border stone along the archway is missing.

B.—Same remarks as above. Centre recess damaged considerably by boys, who are in the habit of throwing stones at the carved pendants and flowers.

The two recesses (C and D) corresponding to A and B have been removed bodily. The inner shell of stone forming the ceiling to the four side domes has all fallen in. The ceiling of the centre dome remains, but there is a gaping crack in the dome itself. The fringe of carved work on the large entrance archway is considerably damaged. The minarets on either side of the main entrance as well as those that existed on the corners have fallen down; also the parapet wall along the front, and the whole is now overgrown with grass and jungle. The staircases are in a ruined condition; most of the steps are either loose or broken.

The whole enclosure is in a neglected state, and overgrown with jungle. The walls round the compound are crumbling away.

Note on works in progress in the Punjab, dated 19th September 1882.

1. The Report of the 10th May 1880 (see page xix) specifies what are the obvious remedies at Lahore and Delhi, whilst the subsequent correspondence with the Punjab Government and Inspector-General of Military Works, quoted in this Appendix, shews what I recommended.

Punjab Report.

2. Since then repairs have been commenced to Jahangir's tomb at Shahdara, on which about Rs 5,000 were expended last year. The importance of this monument will be appreciated from the engravings and chromo-lithographs circulated with this volume. They have been reproduced from drawings made in my Office, and are part of the experimental publications sanctioned by Government, and referred to in paragraph 71, page 12.

Shahdara.

3. In July 1881, Sir Robert Egerton sanctioned repairs to the principal gateway of the Sarai at Nur Mahal. I inspected this in February last, and had the place surveyed and photographed. Heliogravures of the gateway are submitted with this. The repairs are now in progress, but I have not yet inspected them.

Nur Mahal

4. A reference was made to me by Government concerning a proposal to alter and remove some of the old gateways of Delhi, and I inspected them in July 1881, and submitted a report advocating their being left intact. A subsequent decision of Government confirmed this view, and orders were passed accordingly.

Delhi gates

5. The recommendations offered by me in August 1881, in reference to monuments in the Peshawar district (see page clxxxv), resulted in some excavations. General Cunningham had sole direction of the operations. I visited the localities as well as some others in Eusofzai, and addressed the following memorandum to the Punjab Government :—

Peshawar

Memorandum on Ancient Monuments in the Peshawar District, dated 19th June 1882.

During my visit to Peshawar and the Eusofzai district in February last, I had an opportunity of inspecting the very interesting ruins which General Cunningham had selected for exploration.

2. Reaching Peshawar on the 6th February, I had the advantage of conferring with Mr. Cordery, the Commissioner, and learnt from him that Lieutenant Martin, R.E., had just left for Charsuddah with a company of sappers.

3. On the 9th February I accompanied Mr. Beckett, the Deputy Commissioner (who is intimately acquainted with the Eusofzai district), to Hoti Mardan, and meeting Mr. Robinson, the Assistant Commissioner, received the greatest assistance during my stay in Eusofzai. On the 11th February Mr. Robinson and I rode out through Shahbazgarhi to Shewa, the following day visiting Ramgat and riding round the north side of the Karamar hill to Bakshali. At Shewa we were hospitably entertained by Muhammad Umr Khan, and occupied the principal room in his house, one end being slightly raised and railed off with a quaint wooden railing of geometric tracery. At Bakshali we put up in the village guest-house, a shed of mud and thatch, but preferable to tents in the keen climate which prevails at the time of year.

On the 14th February I visited the Takht-i-Bahi, and on the 15th rode to Lieutenant Martin's camp at Charsuddah, where I stayed a night.

4. The following are the points which occurred to me at the various places, and which I commend to the notice of the Punjab Government :—

Inscription at Shahbazgarhi. This inscription has been fully described by Major-General Cunningham in Volume V, page 19, Archæological Survey of India. He thus mentions it :—

"The great inscription of Asoka is engraved on a large shapeless mass of trap rock lying about 80 feet up the slope of the hill, with its western face looking downwards the village of Shahbazgarhi. The greater portion of the inscription is on the eastern face of the rock looking up the hill, but all the latter part which contains the names of the Greek kings is on the western face. The mass of rock is 24 feet long and about 10 feet in height, with a general thickness of about 10 feet."

The inscription is not in a good state of preservation, as the surface of the rock is rough and exposed to weather The only way, in my opinion, of preserving the record is by an impression of the whole inscribed surface

The village headman should be made responsible that no wilful damage is done to the inscription

Ramgat near Nogram —The ruined fortress on the hill of Ramgat is beyond the British frontier in the Khudo Khel country Both Lowenthal General Cunningham and Dr Bellew have described it but no systematic survey or examination has been made to reveal the condition of the various buildings General Cunningham gives a rough plan at page 103, and a sketch of the fort at page 107 of Volume II, Archæological Survey

The patches of shrubs and trees which conceal the walls should be removed and the outline of the buildings carefully laid bare, so as to permit of an accurate plan being made before any extensive removal of earth

A few surface excavations have been made, and small fragments of broken statues, &c, cover the surface of the ground Some of these are represented in the accompanying illustration, and give an idea of the general character of the carvings and their resemblance to Greek sculpture

The village of Nogram was deserted at the time of my visit on account of fights between the sections of the Khudo Khels but I understand that the civil authorities could make arrangements with the tribe for the supply of labour for excavations It would I think, be necessary to pay the men a small daily wage and also to give rewards for remains excavated and delivered perfect and unmutilated Care would be necessary to prevent damage in laying bare the walls of the building On completion of the work and removal of the valuable stones, an agreement should be made with the tribe to prevent wilful damage to the fortress ruins

Karamar Hill —The ruined monasteries, which seem very numerous along this mountain range, are so inaccessible on the steep scarps of the hill that there seems little danger of damage being done wilfully by the natives

I saw the buildings and topes at a distance only, during the ride from Shewa to Bakshali

Bakshali —This village is built on ruins and some interesting discoveries were made lately. An old Sanscrit papyrus book being unearthed in a field was sent to General Cunningham for examination Mr Robinson also obtained an ancient pencil and stone lamp This site would probably yield a good deal of interesting matter but search can only be made voluntarily by the natives for rewards, as the greater part of the ruins are under the village houses

Takht-i-Bahi This prominent hill which rises some 300 feet above the Yusafzai plain, is about eight miles from Mardan and its ruins have been described by General Cunningham in Volume V of the Archæological Survey and by Dr Bellew in his Report on Yusafzai

The ruins are very extensive and most interesting, the disposition of the monasteries and dwellings can be clearly traced from the upper points of the Takht-i-Bahi range but on near approach it becomes evident that great damage has been done by excavators and earthquakes The digging has had but one object namely the ready removal of sculptures and statues which adorned the cloisters and topes, added to this, earthquakes have overturned and rent the massive and lofty walls

The only thing to be done at present is in my opinion, to prohibit irregular and unauthorised excavations and to have the place watched by the headmen of the neighbouring village

Charsuddah —Close to the junction of the Swat with the Kabul river and between the branches of the former stream is a large fort called locally the Bala Hissar General Cunningham identifies the locality as the position of Pushkalavati mentioned in the 7th century A D by Hwen Thsang and directed excavations in the fort and in mounds around the town of Charsuddah The fort which was evidently adapted by the Pathans is too much ruined to be of any value for purposes of conservation Lieutenant Martin who was here at work with a field company of sappers, revealed the principal entrances into the stronghold and some curious irrigation channels of excellent pottery leading from an ancient well He also found in neighbouring mounds some fragments of Græco Buddhist sculptures similar to those already transported from the Peshawar district to the Lahore Museum —only smaller and more imperfect They appeared to me valuable only from an archæological point of view The most remarkable sculpture shown to me by Lieutenant Martin was a small stone centaur or human-headed horse

5. The conclusions I arrived at during this visit are as follows —

There are objections to the employment of Pathan sappers in making excavations —

(a) Their religion encourages them to deface figure carvings
(b) Their work depends on the interest which the officer commanding takes in archæology.
(c) The presence of small bodies of soldiers at remote parts of the frontier is apt to tempt the tribes (who are generally at feud with each other) to embroil their enemies in difficulties with the British, easily brought about by a single shot.

6. I am therefore of the opinion that the more efficient manner of securing the preservation of the interesting remains which abound in the Kabul valley is to enlist the people themselves in the work, making it their interest to produce perfect and unmutilated sculptures or other antiquities.

There are, I submit, two ways of doing this—

1st, by placing a sum of money at the disposal of the civil authorities, to be applied in small rewards for perfect specimens of inscriptions, carvings, statuary, coins, or relics of any kind. An annual grant of about Rs. 1,000 would, I think, produce considerable results.

2nd, by systematically removing sculptures, &c., from particular localities, rich in remains, by means of an organised gang of the tribes people.

It would be necessary to provide for superintendence, and to send a responsible person to survey, lay out the tasks, and pay for labour.

7. It is generally agreed that Ranigat would be likely to yield valuable discoveries, and a native with local knowledge would probably be the best supervisor. He should know how to measure and make plans of buildings, and learn how to take impressions of inscriptions in gutta-percha paper, &c. It would be best for him to be directly under the civil authorities in the district, but I would direct the technicalities of his operations, and inspect his work as occasion required.

A small grant of Rs. 2,000 would probably cover such expenses.

8. As regards the interesting localities in the district, I recommend that the headmen of villages, or influential natives, be made responsible for preventing damage; and the ruins at Jamal Garhi, Takht-i-Bahi, Sahri Bahlol, Sawaldher, and Kharkai are particularly worthy of custody.

6. Some repairs and improvements have recently been carried out in the Delhi Fort under the Military Works Branch. Captain Turner, R.E., the Executive Engineer, has cleared and renovated the two pavilions referred to at page xxv (Haiyat Baksh) and at page ccix (Sawan and Bhadon). At the request of Colonel Holmes, R.E., the Superintending Engineer, I have prepared a design for a balcony to some quarters over the Delhi Gate of the Fort. At present the balcony is of wood and corrugated iron, and harmonises ill with the surroundings.

Delhi Fort.

7. Humayun's Tomb near Delhi, and the tomb and mosque near the Kutub known as Jamali Kamali, are in course of being rescued from neglect, and the grounds and structures put in order; but the work is at a standstill for want of allotment of funds.

Humayun's Tomb, Jamali Kamali.

8. The Fatehpuri Masjid in Delhi was purchased by Government at the time of the Delhi Assemblage, and given back to the Muhammadans. The buildings and enclosure were in a neglected condition when I made my report in 1880 (see page xxviii) but I am glad to say that this has been to a certain extent remedied, the enclosure having been cleaned up and planted, and some of the needful repairs executed in the mosque. More, however, remains to be done. At the request of the Commissioner of Delhi, Colonel Gordon Young, I have prepared a plan for building some additional houses round the enclosure of the mosque, and by the letting of these the mosque trustees will increase their income.

Fatehpuri Masjid.

9. Wazir Khan's Mosque at Lahore has been surveyed, and the drawings will show how artistically valuable this building is, and tend, I hope, to bring about better care of the building on the part of its owners.

Wazir Khan's Mosque.

10. The whole of the Punjab work has progressed slowly during 1881-82. The funds granted last year have now been withdrawn, and the employment of Mr. Heath, Executive Engineer, Archæological Division, North-Western Provinces and Oudh, has not been found practicable. The work has consequently been delayed, pending the settlement of who should do it. A special officer, Lieutenant Abbott, R.E., has now been appointed by the Lieutenant-Governor, Sir C. Aitchison, and a contribution of Rs. 38,000 out of this year's grant has been made by the Supreme Government.

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Report on Monuments in the North-Western Provinces and Oudh together with a Note on works undertaken.

Note on Allahabad, Benares, and Jaunpur, dated 11th January 1881.

1. *Buddhist Lât in the Allahabad Fort.*—The Asoka Lât in the Allahabad Fort in front of the Arsenal is one of the most interesting of its kind. It was re-erected in 1837, having been found lying on the ground. The Asoka inscriptions on it date 240 B.C. Those of Samuda Gupta date A.D. 380-400, and there is a Persian inscription of Jehangir's (A.D. 1605) from which it appears to have been re-erected to commemorate the accession of that Emperor. The base is 7 feet 7 inches, the shaft 35 feet, and the diameter at the top 2 feet 2 inches; at the base about 3 feet. Captain Smith, who re-erected the pillar in 1837, built up a pedestal, and translations of the inscription have been printed on paper glazed and fitted into the base. The writing is, however, almost illegible from damp and vegetation which has got behind the sheets of grass, and these notices might be replaced with advantage by some notices printed in enamel on metal.

2. *Akbar's Palace, Allahabad.*—Akbar's palace buildings in the Fort have been almost entirely obliterated. Those that remain have been adapted to the purposes of the arsenal; and the beautiful hall drawn by Daniell and represented in Fergusson's volume on Indian Architecture, page 583, has been so built up, enclosed and furnished with English doors and windows as to appear to be a building contemporaneous with the Ellenborough barracks outside the arsenal enclosure. The interior columns of the hall are whitewashed and enclosed by partitions in order to accommodate arsenal stores, and the building is past any redemption that would have any chance of being entertained.

3. *Akshay-Bat in the Allahabad Fort.*—The so-called underground temple near the arsenal (which is in reality only a building earthed up by accumulated débris) is the temple described by the Chinese traveller Hwen Thsang (A.D. 637). Originally, says General Cunningham, both tree and temple must have been on the natural ground level. The upper portion has long ago been removed, and the only access to the "*Akshay-Bat,*" or "undecaying Banian Tree," now available is by a flight of steps which leads down to a square pillared courtyard. This was once open to the sky, but is now closed to secure mystery and darkness. Hwen Thsang describes the temple as being in the midst of the city of Prayaga (Allahabad), which was situated at the confluence of the Jumna and Ganges, so that the Fort of *Ilahabas* erected by Akbar (A.D. 1572) surrounded this ancient building, and probably was the means of preserving it from being swept away like all other evidences of the old city.

4. *Khusru Bagh, Allahabad.*—These gardens are near the railway station. The tombs of Sultan Khusru, the ill-fated son of Jahangir, of Khusru's mother and of his sister, are in fair preservation, but require (when it can be afforded) more thorough repair. The gardens are well kept up; they were laid out by Jahangir, and are surrounded by a masonry wall.

5. *Buddhist Tope at Sarnath, Benares.*—(Date about 6th Century A.D.)—This monument has been described by numerous people and is well known. General Cunningham writes about it at length in his Vol. I, Archæological Report, pages 103—130. Mr. James Fergusson describes and illustrates it in his *History of Indian*

Architecture, pages 65—68. This interesting Tower, or "Dhamek Stupa" as it is called, is in a very ruinous condition. One side of the sculptured frieze is falling, and has been recently banked up with earth. *Nothing, however, can be done satisfactorily until the unsafe masonry is entirely rebuilt ; and this should be done at once to prevent further damage.*

6. *Benares City.*—My visit was too short to permit of any careful examination of the buildings in the city, but a large number of ghâts and buildings have been built on the river bank, and I propose to make a detailed report, as a great deal may be done in the way of improvement. For instance, one large ghât was commenced by the Maharaja Scindia, but it has sunk and become utterly unsightly, as if disturbed by an earthquake. This subsidence is no doubt due to bad foundations.

7. *Jaunpur.*—The country around Jaunpur became an independent Moslem province in 1397 A.D., and so remained until incorporated by Akbar in the Mogul Empire. The Jaunpur Rulers adorned their capital with a series of buildings of a distinct Pathan character unsurpassed in India for magnificence and for individuality of treatment (see Fergusson's *History of Indian Architecture*, chapter IV).

8. *Jaunpur Fort Mosque.*—The *mosque in the Fort* was erected in A.D. 1398 out of the materials of a Hindu building. In front of the mosque not mentioned by Fergusson is a stone lât or column about 40 feet high, with 3 bands of Arabic inscription half way up. The date of the inscription is A.H. 801. The front row of pillars in the mosques are sculptured, but those in rear are quite plain.

The central archway has an inscription over it, and so has the interior "mehrab" or niche. The mosque is neglected and in disrepair.

9. *Jaunpur Fort.*—The *Fort* itself is said to have been built by Firoz Shah. It is now in ruins. The two entrance gates are massive and ornate, and are occupied by police. The first gate has carved spandrels and niches inlaid with colored tiles in yellows and blues. The second gate has some delicate bands of sculpture. Both are in the Jaunpur Pathan style, and worthy of preservation and illustration.

10. *Jama Masjid, Jaunpur*—The *Jama Masjid* in the city was commenced in A.D. 1419 out of the columns and materials of a Hindu temple, and is a grand building consisting of a pillared courtyard 220 feet by 214 feet. The east end is ruined ; repairs are in progress to the north and south gateways. The north gate has been almost entirely renewed, but not well. In front of the mosque itself is a sort of gate pyramid, which appears to have supplied the place of a minaret. The interior of the mosque is whitewashed, but its proportions and enrichments in stone and marble are very remarkable. Flanking the sanctuary of the mosque on each side are two vaulted halls 40 × 50 feet. The building is being repaired by Maulvi Abdul Majid, but the old lines are not followed sufficiently carefully.

11. *Atala Masjid, Jaunpur.*—The *Atala Masjid* is a most beautiful mosque situated in the city. The colonnade of the quadrangle is built up of Hindu columns, whilst the gateways and the façade of the sanctuary to the west, with its three "propylons" or pyramid gates, are all of very handsome and ornate Saracenic architecture. The interior of the sanctuary has a very richly carved dome, but it is whitewashed and exceedingly dirty. The colonnades are used for all purposes by the natives of the city, and are also very dirty ; vegetation requires removing from the roofs. Repairs are executed by the Muhammadans, and are in the charge of Maulvi Abdul Majid ; but the work requires to be undertaken with more attention to correctness of detail and with *greater vigour*.

12. *Lall Darwaza Masjid, Jaunpur.*—The *Lall Darwaza* mosque is two miles outside the city of Jaunpore. It is similar in style to the two mosques above described, but smaller. It is in considerable disrepair, and the quadrangle overgrown with grass. Flanking the central sanctuary on each side are raised galleries enclosed by screen work. These were no doubt constructed for purdah women, but now are used as common habitations. The place should at all events be preserved from dirt and vegetation.

The Jaunpur architecture has been illustrated to a considerable extent by Mr. Heath, Executive Engineer of the Archæological Division of the North-Western Provinces, and his drawings should be published for the benefit of museums and schools of art throughout India.

Letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government, North-Western Provinces and Oudh, Public Works Department, dated Simla, 3rd August 1881.

I have the honour to acknowledge the receipt of your letter No. C.-848B.-R. of 1881, concerning the Sarnath Tope at Benares, and in reply to forward a copy of a Report on Allahabad, Benares and Jaunpur, in which I have expressed the opinion that the loose masonry in the Sarnath Tope should be rebuilt. By this I mean that, where the stonework has been displaced or has bulged, it should be taken down and securely replaced, and that where necessary for security plain masonry blocks be inserted to replace what has fallen out and been lost. No new carved work should be done. The upper part of the stone masonry plinth should be laid in cement and secured, as far as possible, against the action of rain; but the mound of brick masonry which surmounts the tope should be simply cleared of creepers and vegetation.

2. I do not think that these measures should cost anything like Rs. 11,000; and if done by daily labour under careful supervision, I am of opinion that a sum of about Rs 2,000 would go far to rescue the tope in the manner I have suggested. I understand that Mr. Heath has been lately to Sarnath, and I recommend that he be asked to furnish an estimate for the work.

Letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government, North-Western Provinces and Oudh, Public Works Department, dated Simla, the 4th August 1881.

I have the honour to report that I visited the Agra Monuments on the 14th April last, in company with Mr. Lawrence, the Collector of Agra, and Mr. Heath, Executive Engineer of the Archæological Division. I again visited Agra on the 17th and 21st July last, and beg to offer the following suggestions regarding the buildings in Mr. Heath's charge. The repairs and restoration of those in the fort are nearly complete, and I strongly recommend that, when complete, they be handed over to the Collector for custody and keeping in good order. The district officers are, as a rule, more permanently located than military authorities, and are much more likely on that account to take an interest in historical and artistic monuments. As I have already pointed out in Appendix II, paragraph 13, of my report dated 10th May, copy enclosed, there should be no difficulty about this, and I consider the matter of very great importance.

2. In Appendix I of the report, page 8, I have recommended that the Somenath Gates be set up in the Diwan-i-am, where they were formerly when the building was used as an armoury.

The gates should be rendered as secure as possible, cleaned, and enclosed in a glazed case, so as to be preserved from dirt and dust. I would suggest that Mr. Heath be asked to furnish an estimate for this.

3. Iron girders are still visible in the roofs of both the Diwan-i-khas and the Khas Mahal, and are very unsightly objects, clashing with the beautiful marble work and mosaics of the buildings. I recommend that an estimate for restoring the ceilings be prepared.

4. The Jahangiri Mahal, which has been so successfully renovated, is flanked by two pavilions which rise above the roof. One of these has been repaired. The second one is enclosed, and is used as a dwelling by the Provost Sergeant, and it should be cleared and put in repair.

5. The rooms between the Angori Bagh and the Jahangiri Mahal, formerly used as the museum, in the fort, require opening out and leaving as they were originally.

6. I venture to suggest that Mr. Heath may be authorised to photograph all buildings before and after they are repaired, so that there may be a record of the good that is done in each case.

7. As regards Fatehpur-Sikri, I would recommend that the Birbal house, Akbar's office, and Miriam's house be cleared, and that a suitable dâk bungalow be built. When at Fatehpur-Sikri with Mr. Lawrence and Mr. Heath, the site between the old mint and the Diwan-i-am seemed to us in every way suitable for the purpose, and I suggest that an estimate be framed. At present the use of the three buildings prevents their being seen and the appurtenances inseparable from a dâk bungalow,—cookhouse, chicks, doors, and windows, &c., do not by any means improve the appearance of the buildings. A really comfortable and commodious dâk bungalow would probably pay at Fatehpur-Sikri. At present visitors, unless they have an order to occupy the Birbal house, have very limited accommodation in Akbar's office, and many people who would like to stay a few days, drive out from Agra and back the same day.

8. The central archway of the great mosque at Fatehpur-Sikri is most unsightly with whitewash, and I recommend its removal, and that the paintings on the walls be as far as possible restored.

9. Some of the columns and colonnades of the less important buildings at Fatehpur-Sikri have been propped up with masonry buttresses, &c., and when such work has to be done at other places, I suggest that the masonry work be made as little noticeable as possible, and roughly picturesque, rather than "spick and span" with neat dressing and pointing.

10. The grounds round the great mosque have been greatly improved by Mr. Lawrence, who has cleared *débris* away, planted a number of trees, and made a new approach road, which lands the visitor under the Grand Buland Durwaza, the exterior of which many visitors in former days omitted to see. Connected with the keeping of the grounds, the question of systematically keeping down weeds, creepers, and vegetation from the masonry courtyard and buildings was

discussed by Mr. Lawrence, Mr. Heath and myself. We agreed that the best way would be to make a complete clearance after every rains. A mason and mali could do the work in a few days.

11. The buildings at Sikandra are vastly improved by the laying out of the grounds and their conversion by Mr. Lawrence from a wilderness of jungle into a stately park. It would be advisable if something could be done by varnishing to preserve the painted work inside Akbar's Tomb, and details of the varieties of ornament should be drawn and colored.

I also recommend that the finials which originally crowned the kiosques on the entrance gate be renewed.

12. The Taj Gardens are in splendid condition, and show off the marble tomb to full advantage. Mr. Lawrence has removed the museum from the fort to the Taj gateway, and the architectural and historic specimens are better and more often seen. He has also taken over charge of the building from Mr. Heath, and has put on several finishing touches by renovating the marquetry door opening into the tomb, and by removing unsightly doors from various parts of the buildings.

13. The Fatehpur-ki-Masjid near the Taj is in need of repair, and is so much a part of the whole group of buildings, that to withhold the necessary measures would be a mistake, and I therefore suggest that the necessary estimates be called for.

Annual Report by Mr. W. F. HEATH, Executive Engineer, of work done during 1881-82 in the Archæological Division, North-Western Provinces and Oudh.

TAJ, AGRA.

1. *Repairing east and west walls with Boorjs.*—Expenditure Rs. 16,332 during year, total to end of year Rs. 28,603. The work done during the year comprises the partial dismantling of the kiosques at the south-east and south-west corners of the enclosure and rebuilding the same. The south-west kiosque has been completed, the upper story and dome being new work.

2. *Tombs Nos. 2 and 3, Taj Serai.*—Tomb No. 3.—Expenditure for year Rs. 6,398. The fallen verandah (about ⅔ of whole) has been restored, dome repaired, and all work necessary for the preservation of the tomb has been done. Inlaying and missing marble inside building has not been done.

3. Tomb No. 2.—Expenditure Rs. 2,877. Work done same as in No. 3.

Cleaning and repairing interior of Taj Gateway.—Expenditure for year Rs. 1,970. Work done comprised the cleaning and recoloring of the whole of the interior, putting in a new plinth, and general repairs to stone and plaster work and renewing inlaying.

FORT, AGRA.

4. *Repairs to Machi Bhawan.*—Total expenditure Rs. 16,020. Expenditure for year Rs. 1,916. The work done was the restoration of the lower story of the Arcade. All the pillars in this were broken, and the building was supported by bricking up the opens between. The brick work has been removed, and all the damaged pillars cut out and replaced with new ones.

Etmadudowlah's Tomb, Agra.

5. *Repairs to river face wall and buildings.*—Total expenditure Rs. 3,847. Expenditure during year Rs. 1,861. The river wall was completed. The pavilion near river, which was used as a visitors' bungalow, was with the consent of the Magistrate opened out, doors and partition walls removed, and the whitewash on the interior removed, so as to expose the fine painted ceiling. The inlaying on front of building completed, that on the ends not being done, as it was not provided for in the estimate.

6. *Repairs to east and west walls and Mock Gate.*—Expenditure Rs. 4,786. Work was only commenced in February, and the larger portion of the expenditure was on the collection of materials.

Sikandra.

7. *Repairs to West Mock Gateway, Akbar's Tomb, Sikandra.*—Total expenditure Rs. 9,950. The south-west and north faces have been repaired, and inlaying as far as was proposed done. The south-west corner of the building had to be dismantled, and foundations dug up so as to get out a peepul tree that had penetrated through the building from founds to roof forcing the whole corner out. Work is in progress on the east face.

8. *Repairing platform round Akbar's Tomb.*—Expenditure Rs. 4,532. The stone facing to the raised platform which was much damaged by trees was dismantled and renewed after removal of roots. A width of 15 feet round the edge of platform was taken up and relaid.

9. *Repairs to Khwaja Atbar Khan's Tomb near Sikandra.*—Expenditure Rs. 1,361. The villagers who inhabited this tomb and had it completely covered in with huts were brought out; the huts, &c., removed. The building cleaned and repairs done so as to preserve the handsome many-domed pavilion on the upper platform.

10. *Repairing East Mock Gate, Akbar's Tomb.*—Expenditure Rs 991. This gate is so much damaged that to thoroughly repair it, it should be totally dismantled. To prevent as far as possible further decay, a new solid roof has been put on. All trees dug out and all the cracks, &c., well pointed so as to stop damage by water.

Fatehpur-Sikri.

11. *Repairs to Hathiphúl.*—Expenditure Rs. 5,135, for year Rs. 1,350. This gateway with the Sungeen Boorj attached to it has been thoroughly repaired, all damaged stone work renewed, portion of the arching on interior of domed roof taken down, repaired and reset. Work complete.

12. *Repairs to Mosque and Durgah, Fatehpur-Sikri.*—Total expenditure Rs. 20,368, for year Rs. 9,897. The principal work done during year has been the restoration of the white marble inlaying on the gates, the completion of the roofing, and repairs to red sandstone. The work is nearly complete.

13. *Repairs to Amkhas and 100 feet of Dewan-i-am, Fatehpur-Sikri.*—Expenditure Rs. 8,064. The exterior of the plinth verandah pillars and part of the roof of the Amkhas were in a very shaky state. They have all been dismantled and restored. The 100 feet of Dewan-i-am operated on is 50 feet on either side of Amkhas. This was dismantled and completely restored at a cost of Rs. 27 per foot run.

14. *Repairs to Gates, Agra Road, Fatehpur-Sikri.*—Expenditure Rs. 1,797. The gates on this road were pointed, cleaned, patched with rubble masonry and re-roofed so as to stop decay as far as possible.

TOMB OF FEROZE KHAN, NEAR AGRA.

15. Expenditure Rs. 3,620. This handsome building was completely covered with native huts, which were through the agency of the Magistrate removed, and the building has been put into a thorough state of repair. Some of the sandstone carving on this building is the finest about Agra.

TOMB OF SADIQ KHAN AND SALABAT KHAN, NEAR SIKANDRA.

16. Expenditure Rs. 2,975. The Magistrate cleared out the people who used to live in these buildings, and they have been put into a good state of repair so as to arrest decay. Portions of the baradari which were dangerous were taken down and rebuilt.

JAUNPUR DISTRICT.

17. *Repairing Atala Masjid, Jaunpur.*—Expenditure Rs. 6,713. The work was confined to two sub-heads "roofing" and "cleaning and pointing."

The last included digging out trees from the masonry, and minor repairs to stone work.

HAMIRPUR DISTRICT.

18. *Repairs to Jaini and other Temples, Hamirpur District.*—Total expenditure Rs. 2,325. Expenditure for year Rs. 1,175. The work for the year was on the Kakra Marh at Mahoba, the Rohilia Sigari and Sikora (or Barsi) temples, the buildings abutting on which were cleared away. Trees and jungle removed from the ruins, and any of the fallen structure that could be got into its place was replaced. Much more cannot be done, as the fallen stones have been removed for bridge building and other district works.

PETTY WORKS.

19. Rs. 286 was spent in rebuilding a portion of the enclosure wall at Sikandra gardens.

Rs. 324 was spent on the maintenance of the Anguri Bagh, Agra Fort.

Rs. 490 spent on repairs to masonry in different buildings at Fatehpur-Sikri.

Rs. 474 spent on repairing the Nagina Masjid, Fatehpur-Sikri, and

Rs. 758 on different petty works under Rs. 200 each.

Extract from a letter from the Government, North-Western Provinces and Oudh, Public Works Department, to CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, dated 23rd June 1882.

* * * * *

Under these circumstances all projects and proposals connected with archæological questions in the North-Western Provinces and Oudh will in future be submitted to you by the Executive Engineer, Archæological Division, for your consideration and suggestions before being finally dealt with by this Government in the Public Works Department. This procedure does not contemplate any connection on your part with subsequent execution of the works, which will, as heretofore, be supervised by the Superintending Engineer, 1st Circle, Provincial Works. But this Government would invite your inspection of the wokrs in progress whenever convenient, and the completion report will be sent to you.

Note on Works executed in the North-Western Provinces, dated 20th September 1882.

Agra.

1. The great bulk of the work done at Agra from 1875 to 1879 has been reported on in Appendix H i, page xxiv.

2. Since then the finishing touches have been put on to the buildings at the Taj and in the Fort. There is still some work to be done at Fatehpur-Sikri, where I hope a suitable bungalow will be built in order to free the Birbal House, Miriam House and Akbar's Office, which are at present occupied by travellers and district officers.

Fatehpur-Sikri.

Sikandra

3. At Sikandra the finials to the kiosques on the various structures require to be renewed. A most curious discovery has been made with reference to this building. Akbar's tomb rests in an underground vault, a second tombstone is on the uppermost terrace; but Mr. Heath has lately discovered an intermediate chamber, in which there is a third tombstone surrounded with massive square columns. This looks as if the terrace had been raised to better the architectural appearance of the building.

4. The painted interiors at the tombs of Akbar and Etmad-ud-Dowlah sadly require preservation, and experiments are about to be made. Some colored drawings of ceilings in the latter building accompany this report.

5. The Fatehpur-ki-Masjid, which is at Taj Ganj, has been pronounced by Mr. Heath to be beyond repair; but I hope he will exercise his ingenuity and find some reasonable means of keeping it from tumbling to ruin.

6. A reference has been made by the Inspector General of Military Works as to any objection to the demolition of the Dansa-ki-Haweli in the Agra Fort to make room for some quarters, and I have submitted a plan showing the portions of the building that are architecturally interesting and worth preserving. I regret to have to state that up to the present one of two handsome red sandstone pavilions flanking the Jahangir Mahal in the Agra Fort is still enclosed and walled up as a quarter for the Provost Sergeant. Some means will, I hope, be found to find a more suitable residence, and that the building will be cleared and restored.

7. At Jaunpur, the Jama Masjid repairs have reverted to the Mussalman community, and been taken out of Mr. Heath's hands. This will certainly not conduce to good or cheap work.

8. The old Buddhist Tope at Sarnath, near Benares, is still neglected; but I hope that the needful preservative measures will before long be ordered by the Lieutenant-Governor, Sir Alfred Lyall.

9. I would urge the expediency and convenience of affixing to each of the Agra buildings a marble tablet bearing the name and date of each structure, and the date on which repairs were completed.

V

Note on Monuments in the Central Provinces, dated 21st September 1882.

I have unfortunately been hitherto unable to visit any buildings in the Central Provinces, but I ventured to point out to the Chief Commissioner, in a letter dated the 29th July 1881, that I thought the remains of buildings at Baraghat and at Mandhata to be worthy of more than ordinary remedies, and I hope to be able this season to visit and inspect them.

W

Note on the Monuments in Maisur.

I have not been to any place in Maisur as yet, but I learn from Colonel Sankey, R.E., who was at one time in charge of the Public Works Department in Maisur, that in his time repairs were executed to the great temple at Hallabid, to the Baillur temple, and to the small temple of Somnathpur.

2. I hope in course of time to visit these and other monuments of interest in the Maharajah's territories.

X

Report on Monuments in the territory of H. H. the Nizam of Haiderabad, together with a Note on Works undertaken.

Note on Kalburgah, dated 25th June 1881.

My stay in March last at this most interesting place was rendered doubly agreeable through the courtesies of the Nizam's officers, the Sudder Talukdar, and Mr. N. W. Woods, the Executive Engineer of Kalburgah.

2. My first visit was to the "Banda Nawaz," the tomb of a saint who came to Kalburgah in the reign of Firuz Shah, A.D. 1436. It is about 1½ miles east-north-east of the Nizam's bungalow, and is reached by a road passing through a suburb of low houses. On ascending some steps into an enclosure, the tomb appears in front. It is a plain dome about 80 feet high. The inner shrine of the saint is of repoussé silver work, ornamented with circular medallions. Near the saint's tomb is that of his grandson, and south of the enclosure is another, of the saint's eldest son. *All three buildings are of singularly good proportions and worth drawing.* Unfortunately each year adds a coat of whitewash to the masonry, and the sculptures are getting more and more obliterated. The endowments come to about Rs. 80,000, and the *cost of removing the whitewash could well be afforded by the Trustees.*

Worthy of illustration.

3. South of the tomb enclosure is a handsome "Nakarkhanah," and in the valley below a "caravanserai," with a "Madrasah" and a mosque on the right, all of stone. The serai has a huge archway, and the columns of the buildings are of unusual design. *Illustrations would be valuable.*

Buildings near worthy of illustration.

4. **Tombs of the Bahmani Kings.**—These are about one-third of a mile south of the "Banda Nawaz." The principal building has two domes, and is now used as a Revenue Court. The doorways have some nice incised plaster arabesque work. The exterior arches of the walls are filled with bold geometric traceries. The interior of the building has some extremely good arched work in plaster, but the dome is black with age, smoke, and bats.

Revenue records in one building.

5. Under one of the two domes is a black tombstone. The office records are stored here.

Judicial Court, &c., in other buildings.

6. Another tomb is in use as a Judicial Court, others are occupied as offices by police, guards, treasury, &c. The building adapted for the latter has some good arch-work in the dome.

Worth drawing.

7. *Vegetation has attacked many of the domes and ought to be destroyed. The buildings are worth preserving and drawing.*

8. **The Great Mosque.**—This remarkable structure dates from the 14th century, and was erected with other buildings at the time that Kalburgah was the capital of the Deccan. It stands in the fort, which is a massive stronghold of that period, and measures about 216 feet east and west, and 176 feet north and south. Its peculiarity is that the whole area is domed over, the light and air being admitted through the ranges of arches to the north, south, and east. The merit of this system is that the mosque is at all times in shade and protected from the sun. Whether the peculiar construction arose out of the form of some previously existing Hindu edifice is a question. Mr. Eastwick calls it "the Temple of Raja Kalchand, which the King Gangu Bahmani converted into a mosque."* Be this as it may, the fact remains that, whereas the early Indian mosques were open courtyards surrounded by colonnades, this is a solitary instance of the whole area being under cover, and as such has a special architectural value of its own.

Condition.

9. The stone columns supporting the domes are very massive. Only one of them has fallen and *might worthily be renewed.* Four lights have been introduced in each of the small domes. The building was unoccupied during my visit—in 1878 it was used for famine relief purposes—now it is dirty and neglected, a portion of the arches being filled with loose stone. I was informed that it is intended to open out a roadway through the fort communicating direct with the great mosque. This would be a great improvement, *and the opportunity might then be taken of repairing and cleaning out the building.*

10. On a bastion, 40 feet high, in the fort is a large gun of coiled steel with horizontal bars in the centre. It measures 26 feet long, 7 feet 6 inches round at the breach, and 6 feet at the muzzle. The bore is 11 inches in diameter. The gun *should be preserved in situ.*

* This seems doubtful, as the architecture is purely Moslem.

11. **The Jama Masjid.**—Near the Shah Bazar is a vast building—the Jama Masjid—with square columns, pointed arches and small domes, surrounded by a quadrangle. The Nizam's Government have repaired it.

Letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Resident, Hyderabad, dated Simla, 11th September 1882.

I have the honour to acknowledge the receipt of your No. 135-1882-83, forwarding a communication from His Highness the Nizam's Minister, dated 30th March 1882, on the subject of repairs to the ancient buildings at Kalburgah.

2. Referring to the Roza of Khwaja Banda Nawaz, the proposal to remove the several coats of annual whitewashing accumulated on the walls is in every way desirable; but I strongly deprecate the subsequent whitewashing of the walls and picking out the ornamental sculpture in black. All masonry work should, I submit, be left plain without any coats of whitewash or colour. This remark applies also to the tombs of the Bahmani Kings, the *stone masonry* of which should, I think, be left clean and uncovered by any additional coatings.

3. In regard to the large masonry mosque in the Fort, the rebuilding the fallen column is a very proper step towards maintaining this interesting edifice; but I would mention that any substantial or solid closing in of the various sections of the building would detract from its handsome appearance. That portion of the edifice which is not sacred for praying purposes could be screened off for use as schools, &c., and the accompanying lithograph of a mosque at Cairo furnishes a suggestion for an enclosure, according to the precedents of Moslem architecture. Hoping to hear further of the steps taken at Kalburgah for the maintenance of those valuable monuments, &c.

Note on Works undertaken, dated 21st September 1881.

The foregoing explains what has been recommended and contemplated for Kalburgah. I hope to inspect the works during progress.

2. In December 1881 His Highness the Nizam issued orders to provide doorways to certain of the caves at Ajunta, and I understand that this seasonable remedy has been of considerable benefit to the caves and the paintings which cover their ceilings and walls.

3. I was accordingly authorised in July last to express the satisfaction of the Governor General in Council for communication by the Resident at Hyderabad to the Government of His Highness for the preservation of these most interesting monuments.

V.

List of some ancient and modern Forts and Citadels in India.

(*Under correction.*)

Punjab.

Punjab.

1 ATTOCK—Muhammadan. Akbar, 1583.

2 BALLABGARH—Delhi—Muhammadan.

3 CHARSUDDAH—Peshawar—Old Pathan Fort called Bala Hissar, built on the site of Pushkalavati, the ancient capital of Gandhara.

4 DELHI (OLD FORT)—Lâlkot, 1052—Hindu.

5 Kila Rai Pithora, 1180 A.D.—Hindu.

6 Siri or Kila-Alai, 1304—Muhammadan.

7 Tughlakabad, 1321—Muhammadan.

8 Adilabad—Muhammadan, 1325.

9 DELHI (MODERN)—Muhammadan.

10 DEPALPUR—Montgomery—Early Muhammadan; in ruins.

11 EDWARDESABAD—Bannu—Modern, 1848.

12 ISLAMGARH—Bahawalpur State—Hindu.

13 JAHAZGARH—Rohtak—Built by George Thomas.

14 JAITAK—Sirmur State—Hindu.

15 JAMRUD—Peshawar—Muhammadan. Occupied by the British.

16 KOT KANGRA—Early Hindu.

17 KUMLAGARH—Mandi State—Hindu. 1,500 feet above the Beas river.

18 MALAUN—Hindu State—Gurkha. 2,000 feet above the rivers Gamrara and Gambhar.

19 MALLOT—Salt Range—Old Hindu. Contains a temple on the Kashmir style of architecture. Circuit of fort 8,000 feet.

20 MASTGARH—Bashahr State—Gurkha.

21 MICHNI—Peshawar—British.

22 MOHUR—Bashahr State—Gurkha. Contains a famous Hindu Temple.

23 MULTAN—Muhammadan.

24 NAWAGARH—Bashahr State—Gurkha.

25 PATHANKOT—Gurdaspur—A very ancient Fort. Hindi coins of the 1st Century found in it.

26 PESHAWAR—Fort or Bala Hissar of sun-dried brick—Muhammadan.

27 PHILLOUR—A Fort built by Ranjit Singh.

28 RAMGURH—Hindu—Gurkha.

29 RANIGAT—Eusofzai, Peshawar—Early Buddhist, with Græco Bactrian buildings. Strong hill fort.

30 ROTAS—Jhelum—Massive fort built by Shir Shah; covers 260 acres—Muhammadan. Punjab.

31 SHABKADAR—Peshawar—Sikh. Now held by the British.

32 SHER SHAH—Multan—River Fort on the Chenab—Muhammadan.

33 SHORKOT—North-west of Multan—A very ancient Fort. Greek coins found; also a quantity of moulded bricks.

34 TANK—Dera Ismail Khan—Fort of mud. Sir H. Durand lost his life here.

North-Western Provinces and Oudh.

35 AGRA—Muhammadan. Built by Akbar. N. W. P. and Oudh.

36 AJAIGARH—Bundelkhand—Hindu, 9th Century.

37 ALIGARH—Originally Hindu—Enlarged by the Mahrattas.

38 ALLAHABAD—Muhammadan—Akbar, 1575.

39 BARANA—65 miles west-south-west of Agra—Old Hindu Fort. Added to by Muhammadans and Jats.

40 BATESWAR—13 miles south-east of Agra—Hindu Fort.

41 BHIND—Near Etawah—Hindu Fort.

42 BIJAIGARH—Mirzapur—Hindu; ruined.

43 CHARKHERI—Near Mahoba, Banda—Muhammadan.

44 CHUNAR—Mirzapur—Hindu; used.

45 HATHRAS—Aligarh—Hindu; ruined.

46 KALINGAR—Banda—Hindu, 7th Century. Fortifications dismantled 1866. The site is covered with interesting remains.

47 JAGNER—Agra—36 miles south-west of Agra, on a hill 400 feet high, covered with remains of temples, &c. Has a gateway dated 1571, but the fort is ancient Hindu.

48 JALAON—Small Hindu Fort. Remains of fine buildings inside.

49 NALAPANI—Dehra Dun—Gurkha, 1814.

50 NINISAR—Lucknow—Muhammadan, 1362. Built on a Hindu foundation.

51 RAGAULI—Banda—Hill Fort and 1,300 feet above sea—Hindu.

52 RAI BARELI—Muhammadan, 15th Century. Has some handsome tombs and mosques.

53 RAJGHAT—Benares—Erected by the British, 1837.

54 RAMNAGAR—Rohilkhand—Old Hindu Fort, with 54 bastions.

55 SHAHJAHANPUR—Muhammadan.

56 SIRAKAT—Kumaun—Hindu. Strong, but without water-supply.

Bengal and Assam.

57 BARABATI—Cuttack—Hindu, 14th Century; almost ruined. Bengal.

58 BENUGARH—Purneah District—Hindu, B.C. 57; ruined.

Bengal.

59 BESARH—Patna—Buddhist. Large deserted Fort.

60 BIHAR—Gya—Buddhist. Massive walls.

61 CALCUTTA—(Fort William)—British.

62 DURDURIA—Dacca District—Hindu; 2 miles in circuit; contains remains of buildings.

63 GHOLGHAT—Remains of a Portuguese Fort, which grew into Hugli.

64 MONGHYR—Muhammadan.

65 RAJAGRIHA—Patna—Ancient Buddhist; in ruins.

66 ROHTASGARH—Shahabad—Ancient Hindu; 1,190 feet high, 28 miles in circuit; contains many interesting buildings.

Assam.

67 GARHGAON—Sibsagar, Assam—Hindu.

Rajputana.

Rajputana.

68 AMBER—Jaipur—Hindu.

69 BHAINSROR—Udaipur, on a rock—Hindu.

70 BHARTPUR—Hindu, 1733.

71 BHATNAIR—Bikaner—Old Hindu.

72 BIKANIR—Hindu, 3½ mile circuit. Good condition and massive.

73 CHITTORE—Early Rajput.

74 DIG—Deeg—Bhartpur—Hindu.

75 JAIPUR—Tiger Fort—Hindu.

76 JAISALMER—Hindu; 250 feet high; strong.

77 JODHPUR—Hindu, 1549.

78 RAJGARH—Ulwar State.

79 RANTAMBORE—Jaipur State.

80 TARAGARH—Ajmir—Originally Hindu.

Central India.

Central India.

81 BHILSA—Bhopal—Hindu.

82 CHÁNDERI—Gwalior—Ruins; Hindu.

83 GWALIOR—Gwalior—Hindu.

84 JHANSI—Gwalior—Hindu; naturally strong position.

85 JAHAR—Gwalior State.

86 RAISIN—Bhopal—Hindu.

87 SINDWA—Mahratta, one mile in circuit.

Central Provinces.

Central Provinces.

88 ASIRGARH—Nimar—Hindu; strong.

89 BALLAPUR—Chanda—Hindu.

90 CHAMAGARH—Narsingpur District—Hindu; ruined.

91 Deori—Saugor—covering 3 acres—Hindu—1713; 1,700 feet high; occupied by Police, &c. Central Provinces.

92 Dhamoni—Saugor—Hindu, 1600; 52 acres.

93 Dongargarh—Ripur—Hindu; 4 miles circuit; no remains of buildings.

94 Garhakota—Sagar—Hindu, 1629.

95 Laphagarh—Bilaspur District—Hindu; part of the Fort remains in good preservation

96 Rahabgarh—Sagar—Hindu; large Fort with many buildings.

97 Raipur—Hindu, 1460, a mile in circuit.

98 Sagar—Mahratta Fort—covering 6 acres.

99 Singaurgarh—Jubbulpore, on a high hill—Hindu, 1540, remains of the Fort are extensive.

100 Tipagarh—Chanda—Hindu; 2,000 feet above the sea

101 Umrer—Nagpur—Hindu, partly ruined.

Bombay Presidency.

102 Ahmadnagar—Deccan—Muhammadan, 1559, 1½ miles in circuit Bombay

103 Bijapur—Kaladgi—Muhammadan

104 Bukkur—Sind—Muhammadan.

105 Champanir—Panch Mahals—Large and strong, Hindu.

106 Daman—Portuguese Settlement—In Guzerat, two Forts "Damao Grande," "Damao Piquent."

107 Dharwar—Hindu, 1403, falling into ruins

108 Dhulia—Khandesh—Hindu.

109 Diu—Portuguese, 1515, in good preservation

110 Dohad—Panch Mahals—Muhammadan, 15th Century, strongly built.

111 Harischandragarh—Ahmednagar; 3,869 feet above the sea

112 Imamgarh—Khairpur State, Sind. Blown up by Sir C. Napier.

113 Junnar—Poona—Muhammadan, 1436

114 Purandhar—Poona, on a hill, 1,472 feet above sea—Hindu, afterwards occupied by Mahrattas.

115 Raigarh—Thana—Hindu; eventually taken by Mahrattas.

116 Rairi—Ratnagiri—Mahratta, 1662.

117 Parola—Khandesh—Hindu.

118 Partabgarh—Satara—Mahratta.

119 Pawagarh—Panch Mahals, on a hill, 2,800 feet above the sea—Jain; afterwards occupied by Muhammadans, who erected buildings.

120 Pawangarh—Kolhapur—Hill Fort—Hindu.

121 Satara—On a hill—Mahratta.

Bombay. 122 SEHWAN—Karachi—Sind, old fort, said to be of Alexander the Great.

123 SHIVNER—Poona—Mahratta.

124 SHOLAPUR—Muhammadan, 1345.

125 SONGARH—Baroda—Hindu.

126 SURAT—Built 1373, rebuilt 1546.

127 SINHGARH—Poona—Hindu.

Berars.

Berars. 128 BALAPUR—Muhammadan, 1757; large and strong.

129 GAWILGARH—Ellichpur—Muhammadan, 1420. Fort dismantled 1853.

130 NARNALA—Ellichpur, on a hill, 3,161 feet above sea; extensive fortifications—Jain; afterwards added to by Muhammadans; interesting ruined buildings in the Central Fort.

Haiderabad.

Haiderabad. 131 GOLCONDA—Fort used as the Nizam's Treasury.

132 DAULATABAD—On a rock—Hindu (Deogiri); large Fortress.

133 NALDRUG—1½ miles in circuit, on a rock 200 feet high—Early Hindu.

Maisur.

Maisur. 134 BANGALORE—Hindu, 1537.

135 BADIHAL—Chitaldrug—Hindu, 16th Century.

136 CHIKBALLAPUR—Kolar—Hindu, 1179.

137 CHITALDRUG—Nagar—Hindu, 1508.

138 DODLALBAPUR—Bangalore—Hindu, 11th Century. In the Fort are the remains of several fine buildings and tanks.

139 MAISUR—Hindu.

140 NANDIDRUG—Kolar, on a hill, 4,810 feet above the sea—Hindu; added to by Muhammadans.

141 SAVANDRUG—Bangalore—Hindu.

142 SERINGAPATAM—Hindu, 1154; existing fortification constructed by Tipu Sultan.

143 SIRA—Tumkur—Muhammadan.

Madras.

Madras. 144 ARCOT—Hindu—Now almost ruined.

145 ARIA KUSSUM—Near Pondicherry—Hindu.

146 ARNI—North Arcot—Hindu; in ruins.

147 ATUR—Salem.

148 AMBERDRUG—North Arcot, Madras.

Madras.

149 Bellary—Hindu, 15th Century; strong.
150 Bobbily—Vizagapatam—Hindu.
151 Cannanore—Malabar—Hindu.
152 Chaitpet—South Arcot District—Hindu.
153 Chandragiri—North Arcot—Hindu, 1510.
154 Chingleput—Hindu, 16th Century.
155 Chetyai—Malabar—Dutch, 1717.
156 Cochin—Malabar—First European Fort in India, Portuguese, 1503; now ruined and occupied by a light-house.
157 Covelong—Chingleput—Muhammadan, 1745; blown up in 1752 by Clive.
158 Cuddalore—South Arcot—Muhammadan; in ruins.
159 Fort St. David—South Arcot, 17th Century. Parts in good preservation; is a landmark for mariners.
160 Devikotta—Tanjore on the coast at the mouth of the Coleroon River. An early settlement of the Company; ruined.
161 Dharapuram—Coimbatore. Fort dismantled in 1792.
162 Dindigal—Madura, on a rock, 1,223 feet high—Hindu. Was occupied by the British until 1860; great natural strength.
163 Gandikot—Cuddapah District, 1,670 feet high—Hindu, 1589.
164 Ganjam—Company's Fort, 1768.
165 Gooty—Bellary—Mahratta, 16th Century.
166 Gurram Konda—Cuddapah—Hindu.
167 Gingi—South Arcot—Hindu, 1442. Several fine buildings in the Fort.
168 Kanyagiri—Nellore—Hindu, 13th Century; on a hill 1,500 above the sea. There is an ancient temple here.
169 Karanguli—Chingleput.
170 Fort St. George—British, 1609.
171 Palghat—Malabar—Hindu.
172 Pennakonda—Bellary—Hindu; afterwards occupied by Muhammadans, who left many buildings.
173 Peramakal—South Arcot—Hindu; on a hill 370 feet high.
174 Raidrug—Bellary—Hindu.
175 Tanjore—Hindu—Occupied by Mahrattas.
176 Sankaridrug—Salem—Hindu; very strong.
177 Satyamangalam—Coimbatore—Hindu.
178 Tellicherri—Malabar—Hindu; used as a jail.
179 Tiajar—South Arcot—Old Hindu.
180 Tranquebar—Tanjore—Built by the Danes, 1624.
181 Trivandrum—Travancore—Hindu; full of quaint wooden buildings.
182 Vellore—North Arcot—Hindu, 1,500 strong. Has a beautiful temple inside.
183 Vinukunda—Kistna—Old Hindu.